

DUN'S REVIEW

and Modern Industry

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September 1957 75¢



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DUN'S REVIEW

and Modern Industry

Volume 70 No. 3

September 1957

Articles

What Makes Executives Run? _____	36
<i>Arch Patton</i>	
Washington as Industry's Leaders See It: Report No. 2 of The Presidents' Panel _____	39
<i>Kenneth Henry</i>	
When a Company Sells Out _____	43
<i>Edward R. Bagley</i>	
Business Men with Brush and Easel _____	45
Buying Contract Research: An Inside Guide to "Outside" Research _____	46
<i>Melvin Mandell</i>	
Attracting Future Executives: What Bait Are You Using? _____	51
New Dimensions in Latin American Markets _____	97
<i>Alexander O. Stanley</i>	
How to Sound like an Executive _____	134
<i>Stephen Josephs</i>	

Extra Emphasis Feature

Packaging: Industry Looks Ahead _____	<i>Annesta R. Gardner</i>
Companies Tell Their Packaging Plans _____	59
New Trends in Packaging _____	67
101 Ways to Improve Your Package _____	76
Packaging in the Atomic Age _____	83

Departments

The Reviewing Stand _____	4
Business Failures _____	9
Heard in Washington _____	15
The Trend of Business _____	27
Employer Relations _____	93

International Markets _____	97
Sales & Distribution _____	115
Executive Bookshelf _____	125
Films for Management _____	131
Editorial _____	148

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THE COVER



Tea-bag or turbine, it's got to be packaged—and today manufacturers of industrial as well as consumer goods are taking a new look at the problem and coming up with imaginative and profitable solutions. Our cover artist this month is James Flora.

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Alex Lewyt, President, Lewyt Corporation, as photographed by Arnold Newman

Alex Lewyt cleans up 102,318 orders in one day with telegrams

"When the Lewyt big wheel vacuum cleaner was unveiled at our sales meeting," says Alex Lewyt, "response was tremendously favorable. Distributors were excited—wanted to get the news to our dealers immediately. We agreed—but we also wanted to get *orders* fast to plan our production schedule. So telegrams making the announcement and asking for orders by wire were sent simultaneously to thousands of dealers. Back came an avalanche of orders—102,318 of them in less than 24 hours!"

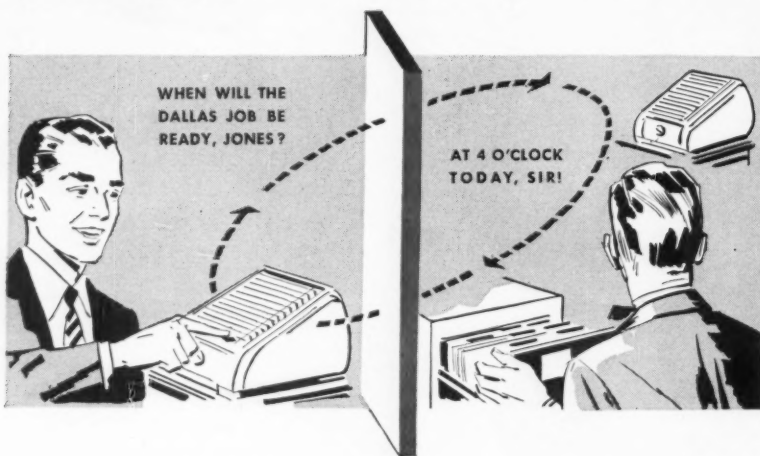
More than a million times a day, business finds it wise to wire. Telegrams quote prices, confirm orders, route shipments. Speed plus the written record make the telegram essential to American business.

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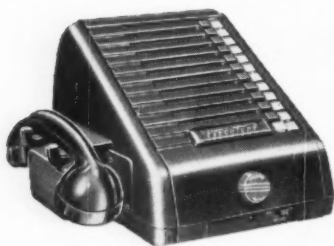


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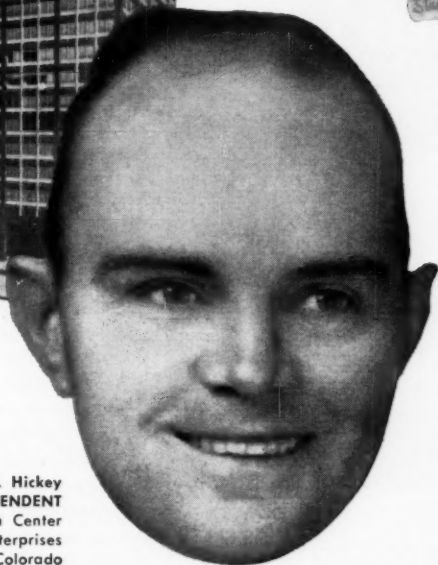
• In the brief dialog entitled "How to Sound like an Executive," which appears in this issue, there is an interesting distinction implied if not stated. Executive jargon is the game of clichés played by management parrots. It has less flavor, and certainly less accuracy, than the Latinisms of a hospital interne, less poetic metaphor than the slang of the underworld, and less color than the epithets of the baseball bleachers. It is often no more than a high-level excursion into the obvious with a touch of VIP snobbery added.

Where techniques are involved, complexities of languages are expected. One cannot simplify the formula for an H-bomb or the mathematical or chemical equations of nuclear fission. But the results can be stated in a simple declarative sentence from Genesis: "Let there be Light."

The management parrot likes to borrow the word that sounds impressive but is not necessarily expressive of a precise meaning. The verb "implement" hid in the dictionary for a century or more. Then Washington discovered it during World War II, and it became the cliché of the directive. The verb "contact" was never in favor with the purists, but it is still the salesman's travelling companion.

No one expects every conversation to be radiant with Shavian repartee, or fresh with the simple wisdom and kindly wit of a Will Rogers. But it is pleasing to hear words and phrases that reflect a careful mind at work.

• In looking over the responses to The Presidents' Panel, while Ken Henry was digesting the specific comments, we were impressed by the kindness of the executive mind. To state a cliché, "Presidents are people," and they have a sense of responsibility for people—their employees, their neighbors, and their fellow citizens. There is no hermit among them, crabbed or anti-social. They are more than willing to bear their share of anxiety for the future. Another aspect of the trained mind is shown in the careful manner in which they avoid slavery to statisti-



Mr. W. E. Hickey
BUILDING SUPERINTENDENT
Mile High Center
Webb & Knapp Enterprises
Denver, Colorado



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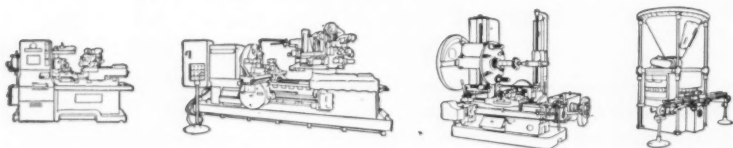


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... and INCREASED PRODUCTION 45%! "

As part of a complete plant modernization program, the American Bosch Arma Corporation recently replaced 4 hand turret lathes (*2 machines on a 2-shift basis) with 2 Potter & Johnson 3-U Automatics to produce hard Nitralloy parts requiring 25 turning, facing, boring and forming cuts. Output is increased 45%, and one operator on one shift handles both P&J Automatics . . . releasing 3 machinists for other work. In addition, smoothness and accuracy are improved, with rejects reduced to an absolute minimum. If you are using hand lathes, you may be missing opportunities for cost savings and production gains. Write now for "34 Practical Production Ideas," information that shows how your jobs can be done the finer, faster P&J *AUTOMATIC* way! Potter & Johnson Company, Pawtucket, Rhode Island.



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cal conclusions or affection for assumptions which are rooted in regional or political tradition. Most of these men have lived with war and the rumors of war for most of their adult lives, and most of their comments on the relationship of defense spending to the health of the economy reflect an unselfish detachment from personal or company interests. The trained, candid mind can be imaginative, intimate and dynamic, as well as remote and impersonal. Quick to criticize what they believe to be policy errors in government administration, especially as it applies to business freedom of action, they are just as quick to offer to serve the government when the call is made. In criticizing government they avoid the generalities that are typical of the run-of-the-mill citizen.

- A cash discount is a premium payment for the use of money, based on a time factor. A trade discount is a payment for services rendered in the function of processing or distribution, usually in accordance with conditions in an industry or trade. From here on, the philosophy of discounts gets hazardous, and often legalistic. In a future issue, we will seek out reasonable answers to the "discount problem," and to such questions as: "Is the discount an allowance for services not rendered?" "Are the mark-ups too high for dealers?" "Should the wholesaling function be re-evaluated?" "Are volume discounts destructive to small business profits?" These questions get more irritating as we probe deeper; we can wait for factual answers.

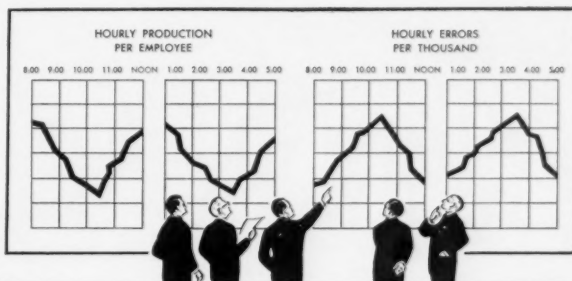
- The regulatory aspects of law bring the lawyer into close contact with the turmoil of the marketplace. The relationship between the lawyer and the business man is a frequent subject of discussion, especially when it comes to the bill for services rendered. Sometimes the only tangible result of a legal consultation is the bill. How shall we measure the value of the intangibles involved—the day-by-day guidance in the complexities, responsibilities, and confusions of business? Elmer Cunningham takes on a large assignment in a forthcoming article on the business lawyer, and comes through with a lot of light on an area that is usually better supplied with heat than with illumination.

—A.M.S.

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"EACH YEAR," says *Newsweek Magazine*, editorially, "monotony-born inefficiency costs industry an estimated \$3 billion in waste of man and machine. Muzak's musical campaign is part of an industry-wide effort to boost efficiency by cutting down on the workaday boredom that leads to tension, and then to errors, rejects, breakage, down time, and accidents."

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HOTELS AND RESTAURANTS know that good-will is money . . . and a tense, irritable employee is bad for business. Music by MUZAK makes the public feel like coming more often . . . helps keep the staff at a peak of cheerful efficiency too.

STORES AND SHOPS discover that MUZAK keeps clerks friendlier and more cheerful while it encourages customers' impulse buying.



*MUZAK—
Reg. U. S. Pat. Off.

THIS INTERESTING BOOKLET (yours upon request, without obligation) is a result of MUZAK Corporation's 20 years of research: a study of the effect of custom-created *work music* upon fatigue and Worker Tension.

The world has long been familiar with the powerful influence of music upon mind and body. But only in recent years have scientific discoveries been made about the effect of music upon Worker Tension. And these have been applied by MUZAK to the development of an entirely new kind of music: *functional background music*.

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It is functional because it is created to perform a specific practical purpose. Like air conditioning, soundproofing, fluorescent lighting, "music-while-you-work" by MUZAK has won a permanent place as a tool of modern management. It more than pays its way in increased efficiency and productivity. For example, typical of thousands of such results, it has

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- Reduced clerical errors in the auditing department of a Kansas bank by 11%.
- Increased output per operator in a work clothes plant by 10%.

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"An Answer to
Worker Tension"

points out how MUZAK (by relieving Worker Tension) lessens fatigue, reduces mistakes, cuts down idle talk, eases friction among employees. It shows the basic differences between work music and other kinds. It charts, for instance, the effects of work music upon the key punch operators and verifier operators of one of the world's largest insurance companies.

This free booklet also describes the four basic features that set MUZAK apart as the world's *only* authentic work music. It takes you inside the MUZAK system; shows how MUZAK creates, programs, transmits, and protects its \$10,000,000 treasury of especially created work music.

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Please send me, without obligation, a free copy of "An Answer to Worker Tension."

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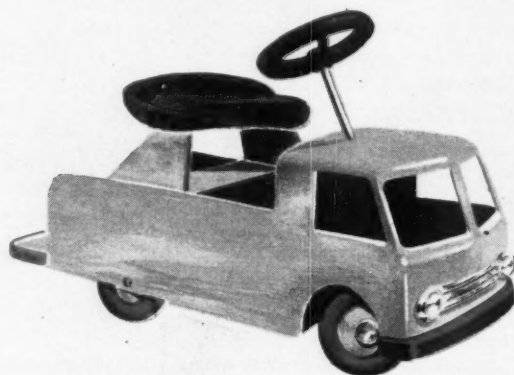
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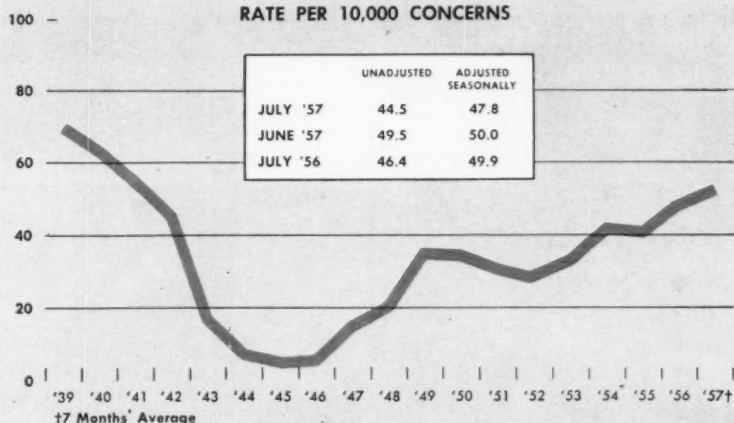
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DUN'S FAILURE INDEX RATE PER 10,000 CONCERNS



FAILURES: Total Up, Rate Down from 1956

IN LINE WITH the normal Summer trend, the number of failing businesses dipped 2 per cent, to 1,509, in July. While the toll was the lowest so far this year, it remained slightly above the 1,018 a year ago. In fact, more concerns succumbed than in any July since prewar 1940.

In relation to the total listed business population, however, failures occurred at a somewhat less severe rate. DUN'S FAILURE INDEX, which extends monthly mortality to an annual basis and adjusts for seasonal variations, fell to 48 per 10,000 enterprises, listed in DUN & BRADSTREET Reference Book from 50 in both the previous month and July 1956.

Dollar liabilities involved in the month's casualties dwindled 14 per cent to about \$44.3 million, the smallest volume in eight months. In all size groups except the \$5,000 to \$25,000 classification, fewer failures occurred than in June. Despite an upsurge from a year ago of 55 per cent among casualties exceeding \$100,000, total liabilities fell 9 per cent short of the creditor obligations recorded in the previous July.

The most noticeable improvement during the month appeared in construction, which suffered the fewest failures since September last year. General builders and heavy contractors felt the benefits of this decline,

WHY BUSINESSES FAIL

Year Ended June 30, 1957

APPARENT CAUSES	MFG.	WHOL.	RET.	CONST.	COMM. SERV.	TOTAL
NEGLECT.....	3	6	4	3	4	4
FRAUD.....	2	4	2	1	1	2
INEXPERIENCE.....	93	88	92	94	92	92
Inadequate Sales.....	55	45	52	35	47	48
Heavy Operating Expenses.....	9	8	5	14	10	8
Receivables Difficulties.....	11	15	6	16	6	9
Inventory Difficulties.....	7	10	10	3	2	8
Excessive Fixed Assets.....	9	3	5	4	10	6
Poor Location.....	1	1	5	1	3	3
Competitive Weakness.....	15	21	22	28	22	22
Other.....	5	5	5	9	5	6
DISASTER.....	1	1	1	*	1	1
REASON UNKNOWN.....	1	1	1	2	2	1

*Less than 1 per cent.

Compiled by DUN & BRADSTREET, INC. Classification based on opinions of creditors and information in credit reports. Since some failures are attributed to a combination of specific causes, the percentages do not add to 100 per cent.

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World's first
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Here's the world's first and only *all-transistor* general purpose large-scale electronic data processing system . . . designed to handle management's most complex problems . . . engineered for universal application . . . system speed, versatility, expandability and economy.

The Transac S-2000 is unsurpassed by any other system in the world. Yet, it is about one-tenth the size of ordinary vacuum tube computers. Mighty in performance . . . extremely compact . . . the

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Transac requires no costly auxiliary air conditioning equipment. Because transistors generate practically no heat.

The entire *Transac* system requires 1/10th the space of conventional vacuum tube computers.

Transac is lightweight . . . the only system of its capability which can be moved easily from place-to-place . . . of particular importance in high rental districts where space is at a premium.

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but casualties among subcontractors increased, mostly in the electrical, masonry, and roofing trades. Fewer wholesale and service businesses sickened and died than in June. Building materials dealers accounted largely for the dip in wholesale trade, and cleaning and repair concerns for the service decrease.

In contrast to the general downturn during July, retail failures rose in all lines except food and automotive. The manufacturing toll increased, mostly in textiles and apparel, lumber, and furniture industries. Machinery manufacturers experienced the best month failure-wise so far this year.

Mortality ran 6 to 10 per cent above 1956 among manufacturers, retailers, and construction contractors. In all retail lines save food stores, casualties equalled or exceeded the number of a year ago. Manufacturers' tolls were twice as heavy as last year in the lumber and iron and steel industries.

Most geographic regions suffered fewer failures in July than in June. Only three—the Middle Atlantic, West North Central, and Mountain States—reported increases. There was a marked slackening to the lowest level this year in the East South Central and East North Central States. Tennessee, Mississippi, Michigan, and Wisconsin accounted for most of these declines.

Commercial and industrial fatalities remained even with 1956 in four areas; the only appreciable decrease occurred in the South Atlantic States. Meanwhile, the East and West South Central States had an upsurge of 58 per cent and the Mountain States one of 52 per cent. Tolls in Oregon and Washington climbed sharply from

THE FAILURE RECORD

	July 1957	June 1957	July 1956	% Chg. †
NUMBER OF FAILURES.	1,059	1,084	1,081	+4
NUMBER BY SIZE AND DEBT				
Under \$5,000	165	169	175	- 6
\$5,000-\$25,000 . . .	530	521	486	+ 9
\$25,000-\$100,000 . .	279	298	302	- 8
Over \$100,000	85	96	55	+55
NUMBER BY INDUSTRY GROUPS				
Manufacturing	181	179	165	+10
Wholesale Trade . . .	74	95	85	-13
Retail Trade	570	553	540	+ 6
Construction	153	164	141	+ 9
Commercial Service . .	81	93	87	- 7
LIABILITIES (in thousands)				
CURRENT	\$44,299	\$51,454	\$49,689	- 9
TOTAL	44,470	51,491	48,713	- 9
†Per cent change, July 1957 from July 1956.				

In this record, a "failure" occurs when a concern is involved in a court proceeding or in a voluntary action likely to end in loss to creditors. "Current liabilities" here include obligations held by banks, officers, affiliated and supplying companies, or the governments; they do not include long-term publicly held obligations.

SEPTEMBER 1957

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BY GLOBE

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SAFETY ALL OVER
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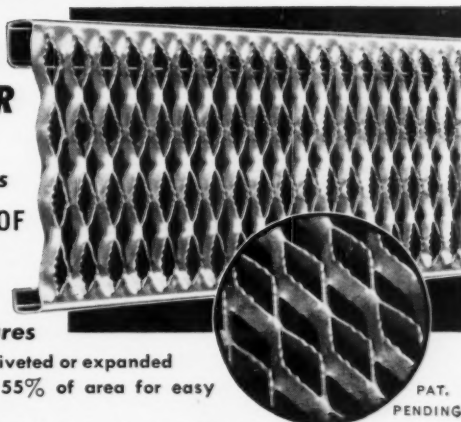
Important Safety Features

- ★ FIRE PROOF ★ SLIP PROOF
- ★ MAXIMUM STRENGTH
- ★ MINIMUM WEIGHT

Important Economy Features

- ★ All one piece, not welded, riveted or expanded
- ★ Open space in excess of 55% of area for easy access of light and air
- ★ No extra supports necessary—channels are integral part of the material. ★ Self cleaning
- ★ Cut and installed like lumber by your own maintenance force. ★ Low in original cost. ★ For balconies, no secondary sprinkler heads needed

Ideal for work platforms, stair and ladder steps, flooring, balconies, catwalks, machinery guards, fire escapes and for original equipment safety treads.



2

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grating**

**The QUALITY GRATING for
Heavy Duty Applications**

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- ★ Vertical alignment of the main load bar assured
- ★ All bars are load carrying bars including secondary bars
- ★ Anti-skid pattern

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Each secondary load bar (A), as projected welded to the primary load bar (B) has a shear strength of 5,000 pounds per weld. There are 28 such projection welds to a square foot of grating. This means that GOLD NUGGET Welded Grating can sustain greater shock loads than other gratings.



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FAILURES BY DIVISION OF INDUSTRY

	(Current liabilities in millions of dollars)		Number		Liabilities	
	7 Months	1957	7 Months	1956	7 Months	1956
MINING, MANUFACTURING	1390	1414	125.4	113.0		
Mining—Coal, Oil, Misc.	36	25	6.6	5.5		
Food and Kindred Products	106	125	7.4	7.4		
Textile Products, Apparel	309	355	18.9	23.1		
Lumber, Lumber Products	274	228	16.0	13.6		
Paper, Printing, Publishing	76	66	5.4	2.7		
Chemicals, Allied Products	33	36	2.6	11.1		
Leather, Leather Products	41	56	5.0	3.3		
Stone, Clay, Glass Products	37	23	1.7	2.7		
Iron, Steel and Products	65	73	22.9	6.6		
Machinery	145	176	15.1	20.2		
Transportation Equipment	36	32	3.8	2.6		
Miscellaneous	232	219	20.1	14.2		
WHOLESALE TRADE	734	746	48.0	44.8		
Food and Farm Products	176	165	12.5	6.6		
Apparel	29	34	2.2	1.7		
Dry Goods	18	27	0.7	0.8		
Lumber, Bldg. Mats., Hdwre.	83	99	5.0	14.9		
Chemicals and Drugs	30	24	1.4	0.6		
Motor Vehicles, Equipment	42	41	2.6	1.5		
Miscellaneous	356	356	23.6	18.8		
RETAIL TRADE	4155	3747	112.6	90.8		
Food and Liquor	684	625	13.8	10.0		
General Merchandise	175	160	7.5	6.8		
Apparel and Accessories	703	717	13.5	14.5		
Furniture, Furnishings	611	477	23.5	15.4		
Lumber, Bldg. Mats., Hdwre.	291	219	8.7	6.8		
Automotive Group	483	427	11.9	14.5		
Eating, Drinking Places	758	667	17.8	13.7		
Drug Stores	91	93	2.4	2.2		
Miscellaneous	359	362	13.5	7.1		
CONSTRUCTION	1232	1006	67.1	55.1		
General Bldg. Contractors	472	381	36.8	30.1		
Building Subcontractors	683	569	23.5	22.3		
Other Contractors	77	56	6.9	2.7		
COMMERCIAL SERVICE	637	601	27.6	24.5		
TOTAL UNITED STATES	8148	7514	380.7	328.2		

Liabilities are rounded to the nearest million; they do not necessarily add to totals.

last year but were offset by a dip in California so that the Pacific States region edged up only a slight 3 per cent. Both the 25 largest cities and the rest of the country experienced a 2 per cent decline in failures between June and July.

From a year ago, however, reverse trends prevailed. Non-metropolitan casualties climbed 7 per cent, whereas the city tolls fell 2 per cent, despite increases over 1956 in nine of the 25 metropolitan districts, including New York and Philadelphia.

Lack of managerial experience and skill currently are taking heavy tolls among commercial and industrial concerns. Rising failures, although they are considerably below prewar 1939, reflect the intensity of economic activity, the vast increase in new businesses, and the narrowing margin between costs and prices. Inexperience and inability to cope with these problems appear to be the reasons for a major portion of the business failures. Meanwhile, casualties attributed to neglect—occasioned by ill health, bad habits, or domestic problems—comprised about 2 per cent. Disasters account for some 1 per cent.

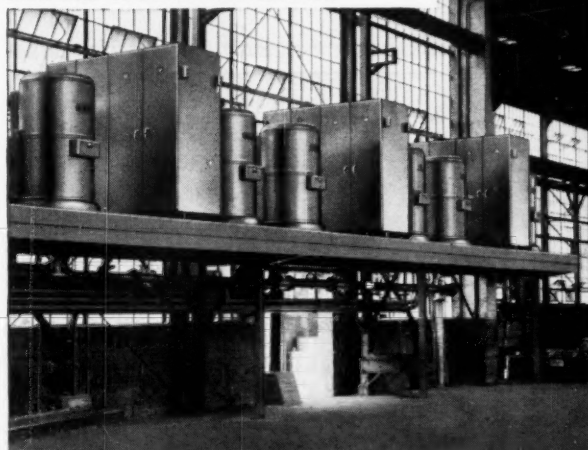
This report was prepared in the Business Economics Department, DUN & BRADSTREET, INC., by John W. Riday and Rowena Wyant.

Choice of the Leaders

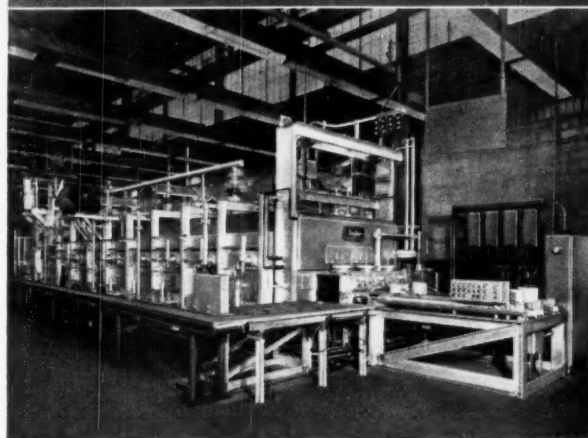
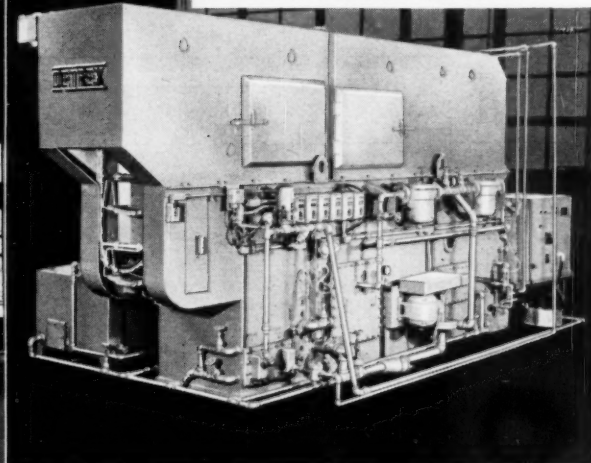


The Mark of Better Machines

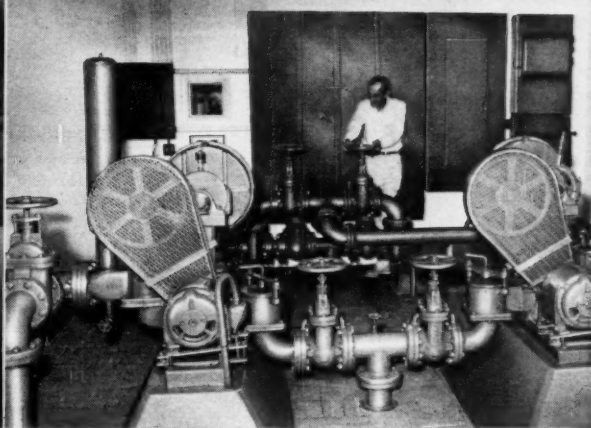
EACH OF THESE 300 KW GENERATORS BUILT BY THE TOCCO DIVISION OF THE OHIO CRANKSHAFT COMPANY USES CUTLER-HAMMER CONTROL.



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The Stars Never Stand Still

Commercial leadership is never self-appointed. It is awarded to a manufacturer when the majority of the market repeatedly specifies and purchases his products. But the laurels of yesterday are quickly lost unless they are won again and again. The leading machinery builders know this and they protect their coveted position with a comprehensive product improvement program . . . new materials, new designs, new components. *The stars never stand still.* It is very significant that so many of the lead-

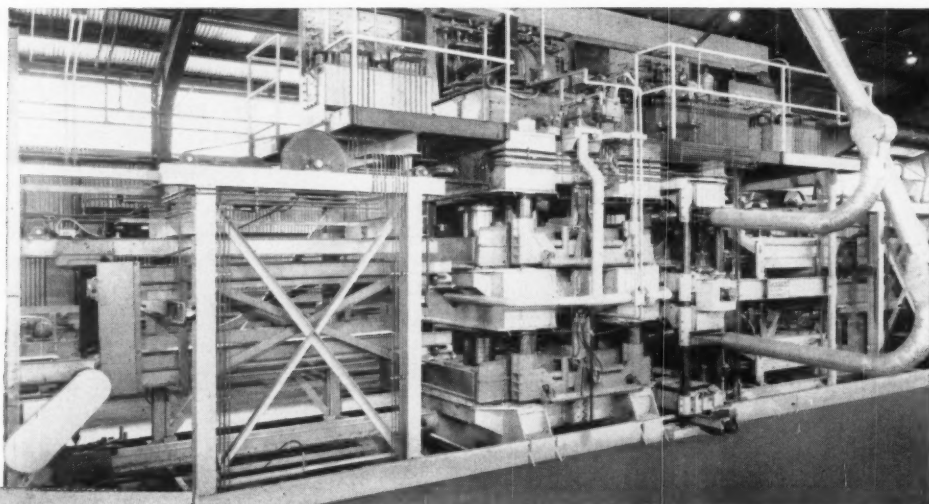
ing machinery builders now standardize on Cutler-Hammer Three-Star Motor Control as original equipment for their machines. Such acceptance is the result of direct competitive comparison that proved a definite superiority. It follows that machinery buyers find Cutler-Hammer Motor Control a reliable guide in selecting machines of greater value and satisfaction. CUTLER-HAMMER, Inc., 1436 St. Paul Avenue, Milwaukee 1, Wisconsin. Associate: Canadian Cutler-Hammer, Ltd., Toronto.

AUTOMATION

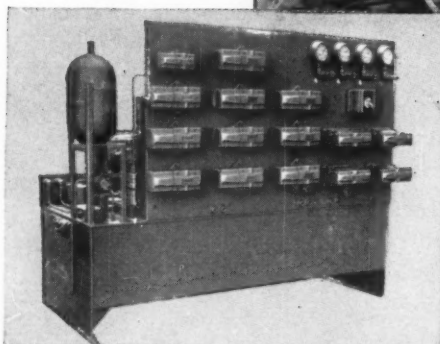
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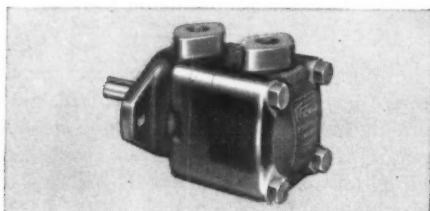
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Prepress area of automatic hardboard plant designed and built as a package unit by the Industrial Development Company, Tacoma, Washington for Columbia Hardboard Company, Inc.



This Vickers Custom-Built Power Unit is individually designed to meet specific needs. It assures dependable performance, improves and simplifies design, reduces installation time and cost, and makes servicing easier. Write for Bulletin 52-45.



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Reported to be the most highly automated in the wood products industry, this plant produces 60,000 sq ft of "Cedawood" per day ($\frac{1}{2}$ " basis).

Seven Vickers Custom-Built Hydraulic Power Units play an important part in this performance; four are shown (in the photograph above) mounted on the platform directly above the prepress. The other three operate a series of automatic transfer systems in various parts of the plant. The transfer drives also use Vickers Vane Type Hydraulic Motors, which provide easily controlled variable speed for synchronizing various operations and for overload protection.

The use of hydraulic variable speed drives makes it easy to vary production rate, flakeboard thickness ($\frac{1}{8}$ " to 1"), and type of product. Additional features are: accurate control, simplicity of installation, and low maintenance. For further information about the many benefits you get from Vickers Hydraulics, ask for Bulletin 55-67.

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HEARD IN WASHINGTON

WASHINGTON, D.C. — Observers here are surprised at the way business has held up during the Summer. The economy seems to have missed the doldrums, and the rising flow of consumer income augurs well for 1958.

One factor in the general prosperity of recent years, Commerce Secretary Sinclair Weeks notes, is the tremendous progress made by science and technology, which has added new fields for employment and profitable use of capital. He also points out that population growth and the increased rate of family formation are encouraging signs for the future. But he believes that the business confidence generated by Administration policies has been an important influence, too.



Small business may not be as much hampered by tight money as has been claimed, a Commerce Department survey indicates. One-fourth of the small business men who replied said they were able to borrow as much as they wanted, and many of the others stated that most of their capital needs had been met.

Those who were not able to borrow were probably considered poor risks by their local banks—and while the Small Business Administration does not need to be quite so cautious as a bank, it cannot afford haphazard lending either. A new business usually intensifies competition in its locality, and others in the same field are inclined to resent the advent of new competition backed by Government. When a loan proves to be a bad one and the stock is sold out at

anything it will bring, competitors are further incensed. All this gets back to Congress, and the SBA hears about it.

Tax reduction would probably be of more aid to small business than anything else, but a reduction large enough to be of material help would cause too much loss of revenue, and Congress has been unwilling to vote it. Even rapid amortization, which would be of great help in the early life of a new business, has met with strong opposition.



The Federal Reserve Board is planning an attempt to increase public understanding of the reasons for "tight money" policies.

Officials believe that if the proper approach is used the general public should be able to recognize the advisability of maintaining a rough balance between savings and investment.

The tight money situation, William McChesney Martin, chairman of the Federal Reserve, points out, is not caused by any reduction in the money supply. On the contrary, the money supply has increased. The tightening effect has been produced by the magnitude and intensity of the demand for credit from all quarters—a demand that could be met only by the creation of more money, which would be directly inflationary.

And the inflationary pressures that exist without this are strong. On the cost side, near-full employment and demands for higher wages are pushing prices up. On the demand side, consumption is at an all-time high.

If the situation is explained simply

enough, the Federal Reserve feels, there will be less talk of the possibility of a "tight money depression."

While economists and most business men were able to separate the wheat from the chaff in the record of Congressional hearings on monetary policy, it is thought that the public was more confused than enlightened.

Reports reaching Washington from the Midwest caution that the decline in bank liquidity should be put in the proper perspective. While liquidity has declined during the post-war period, banks are more liquid than usual in peacetime periods of prosperity—than during most of the 1920's, for example. The decline in liquidity has, however, made banks more sensitive to restrictive monetary policy.



Expenditures by state and local governments are having a decided influence on the national economy. Public outlays by state and local governments have tripled in the last decade and will aggregate more than \$35 billion in 1957. Neither interest rates nor increased costs have prevented these expenditures from reaching new high levels. They constitute one of the important expansionary forces of 1957.

Walter Williams, Under Secretary of Commerce, calculates that 1957 expenditures for advertising may total \$11 billion. The increase is attributed to the desire of advertisers to get their share of the rise in disposable personal income and to the fact



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that increasing output in many lines has called for greater selling effort.

Officials are gratified by the life insurance companies' current campaign to encourage saving. There is evidence that the grass-roots approach of their advertising, which dramatizes the collective effect of small savings, is effective. The public is becoming conscious of the fact that large amounts of capital are essential to increases in productivity and to take care of the backlog of needs for community facilities.

Inadequate streets and highways, need for classrooms, and demand for water and sewer facilities are matters with which everyone is familiar. The problem is to convince the public of the connection between savings and the improvements it wants.



Strikes at cement plants have not delayed the highway program as much as might be thought. They came at a time when contractors could concentrate on grading, drainage, and other phases of construction that precede the use of cement, the Bureau of Roads reports. The projected program for the acquisition of rights-of-way, preliminary engineering work, and the award of contracts are now ahead of schedule.

The cement industry has definite plans for a 20 per cent increase in capacity by the end of next year. This is in addition to the 90 per cent increase in capacity over the last decade. By the time road construction reaches its peak, cement mills will be able to produce 400 million barrels.



Reports from around the country indicate a more cautious attitude on the part of contractors specializing in the mass home building market.

Tight money has played its part in this. Now it has been suggested that the Federal Housing Administration could supply a nonconventional type of mortgage loan and still operate with a minimum of Government support by exercising its statutory authority to make the loan rate flexible.

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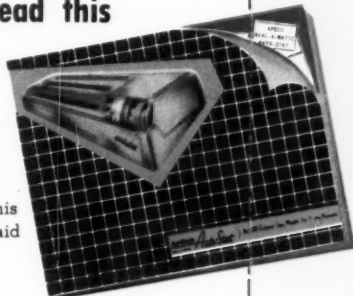
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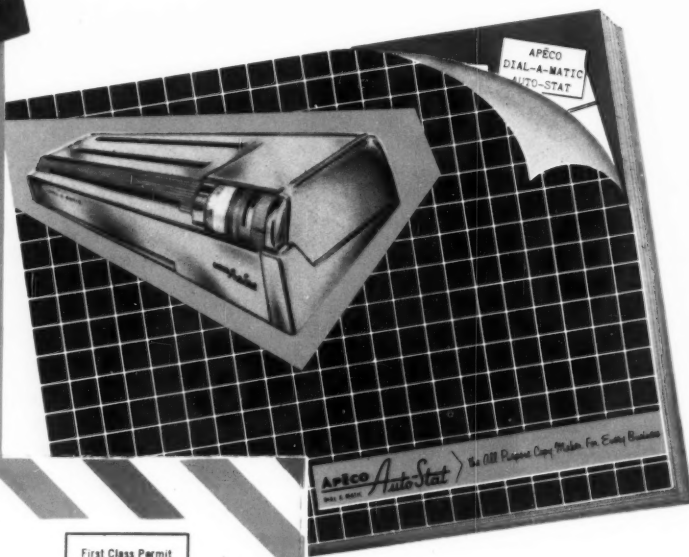
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It is further suggested that, by making rates on Federally underwritten mortgages more sensitive to general market conditions, Federal assistance to housing could be linked to general monetary policy.

The long-term demand for housing promises to be almost insatiable. The Bureau of Census estimates that the number of households will increase by as much as 40 per cent by 1975.

No one disputes that bank debit figures—the total of all checks drawn—are valuable as a business indicator, but statistics from one community, local business men say, may not mean much. Frequently checks are written on the bank of one town and cashed in another. The number of checking accounts is increasing, and more payments for out-of-town purchases are made by check.



A recent report to the Commerce Department indicates that three-fourths of the money going into new plant and equipment is coming from profits and depreciation allowances. Most companies expect to maintain the rate of dividend payments, but in a good many instances it will be necessary to draw on undistributed profits.

Federal Reserve statisticians call attention to a study made by the staff of the Richmond bank which points up the "voracious desire for more and more figures." The prediction of H. G. Wells that statistics "one day will be as necessary for efficient citizenship as the ability to read and write" seems in process of fulfillment. The Federal Government alone spends over \$40 million annually on statistics, and that covers only the earmarked appropriations.

With interest rates and other monetary matters looming larger and larger as issues in the upcoming political campaign, on which the control of Congress will depend, the Senate Finance Committee will continue its studies during the period before Congress reconvenes in January. The problem of the chicken and the egg has been under debate for a long time, and the committee is wrestling with a similar matter in its

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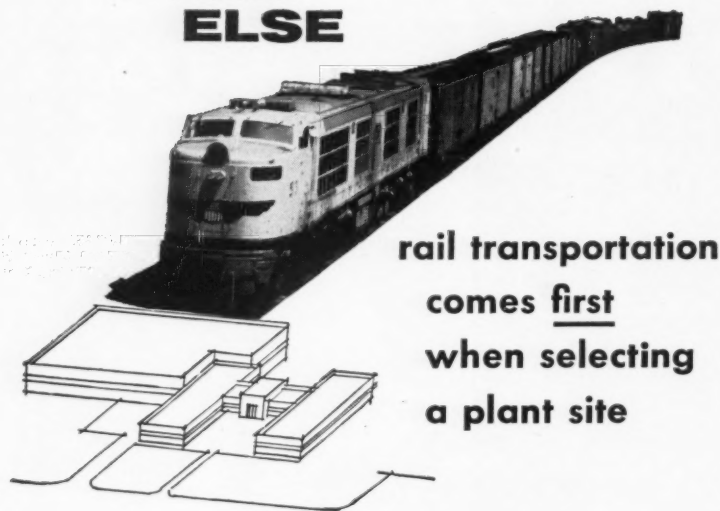
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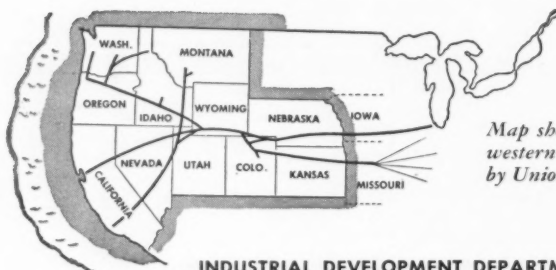


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**INDUSTRIAL DEVELOPMENT DEPARTMENT
UNION PACIFIC RAILROAD**

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discussion of the wage-price spiral. When the President recommended a monetary study by a commission of specially qualified civilians, he had in mind a broad study along the lines followed by the National Monetary Commission, under the direction of Sen. Nelson W. Aldrich, after the depression of 1907. The President felt that objectivity would be easier to attain if the study were made by men holding no political office. Congress would have its innings when the report was submitted. To this proposal Congress would not agree. The best alternative, in the opinion of Administration leaders, was then to authorize the Finance Committee, of which the conservative Sen. Harry F. Byrd (D., Va.) is chairman, to undertake the task. As the President had feared, a struggle for political advantage ensued. Nevertheless, the Committee is expected to develop valuable data on management of the national debt, stability of the currency, deficit financing, the effect of taxes on economic growth, and many other subjects of equally fundamental importance.



As the defense emphasis shifts toward guided missile development, some of the people now employed in aircraft plants will be able to transfer to the manufacture of missiles. But it will probably mean a net loss of employment, and some communities may suffer.

To some extent, guided missiles and other new weapons will require a more skilled workforce. There is a special need for technicians—not necessarily graduate engineers, but men who have had considerable technical experience and have the skill and aptitude for complex work.

Some opinion here holds that nations that have relaxed their restrictions on trade with Red China have not profited very much from their action.

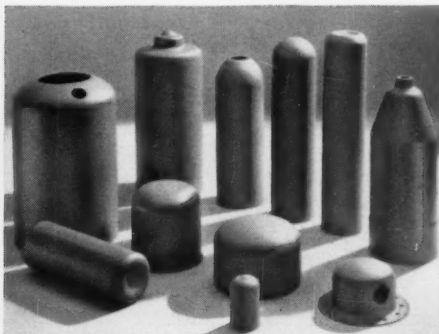
Red China, it is pointed out, has little foreign exchange—so little, in fact, that foodstuffs vitally needed at home are being exported, even at the expense of famine.

Paul Weston

Most modern industries shape up with industry's most modern shapes



Towers for refineries and chemical plants such as this 42-ton, 133-foot stripper. Precision-welded towers and vessels are custom-made by the experienced engineers at the Downingtown Iron Works, Inc. Division, in Downingtown, Pennsylvania.



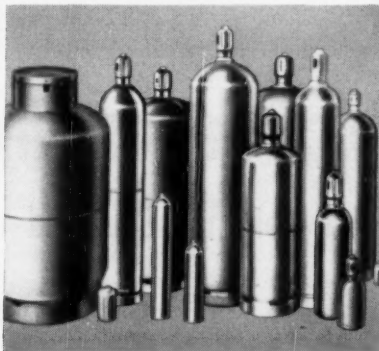
Deep drawn shapes for lighter, stronger products that reduce production time, lower unit costs for manufacturers of air conditioning, refrigeration, pneumatic, hydraulic and pressurized equipment.



Tank trucks for faster LP-gas distribution. Designed with twin tanks for bigger pay loads, better stability, the Hackney tank truck features practical styling, advanced piping and pumping engineering.



Stainless steel acid carboys that carry and stack easily. Hackney builds a complete line of crack-free drums and barrels widely used to cut shipping costs in the chemical, paint, food and other processing fields.



Compressed gas cylinders that help lower shipping costs of both high- and low-pressure gases. Built strong without excess weight, these smooth cylinders are available in many sizes to meet user requirements.



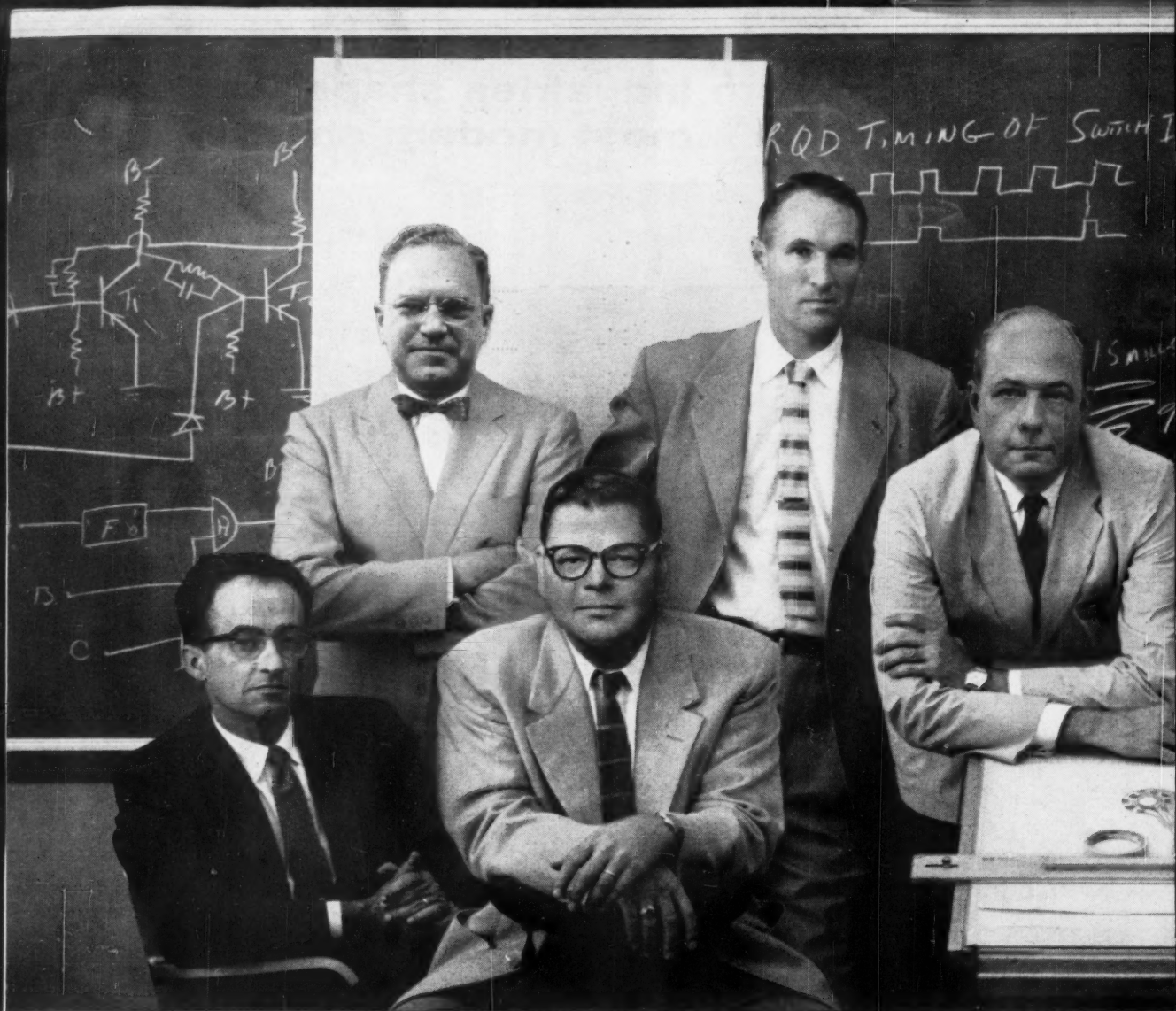
LP-gas systems for industry, home and the farm...featuring better design for easier filling. Hackney produces most types of LP-gas containers. Pressed Steel Tank Company, 1465 South 66th Street, Milwaukee 14, Wis.

Pressed Steel Downingtown



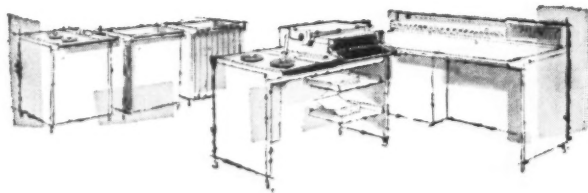
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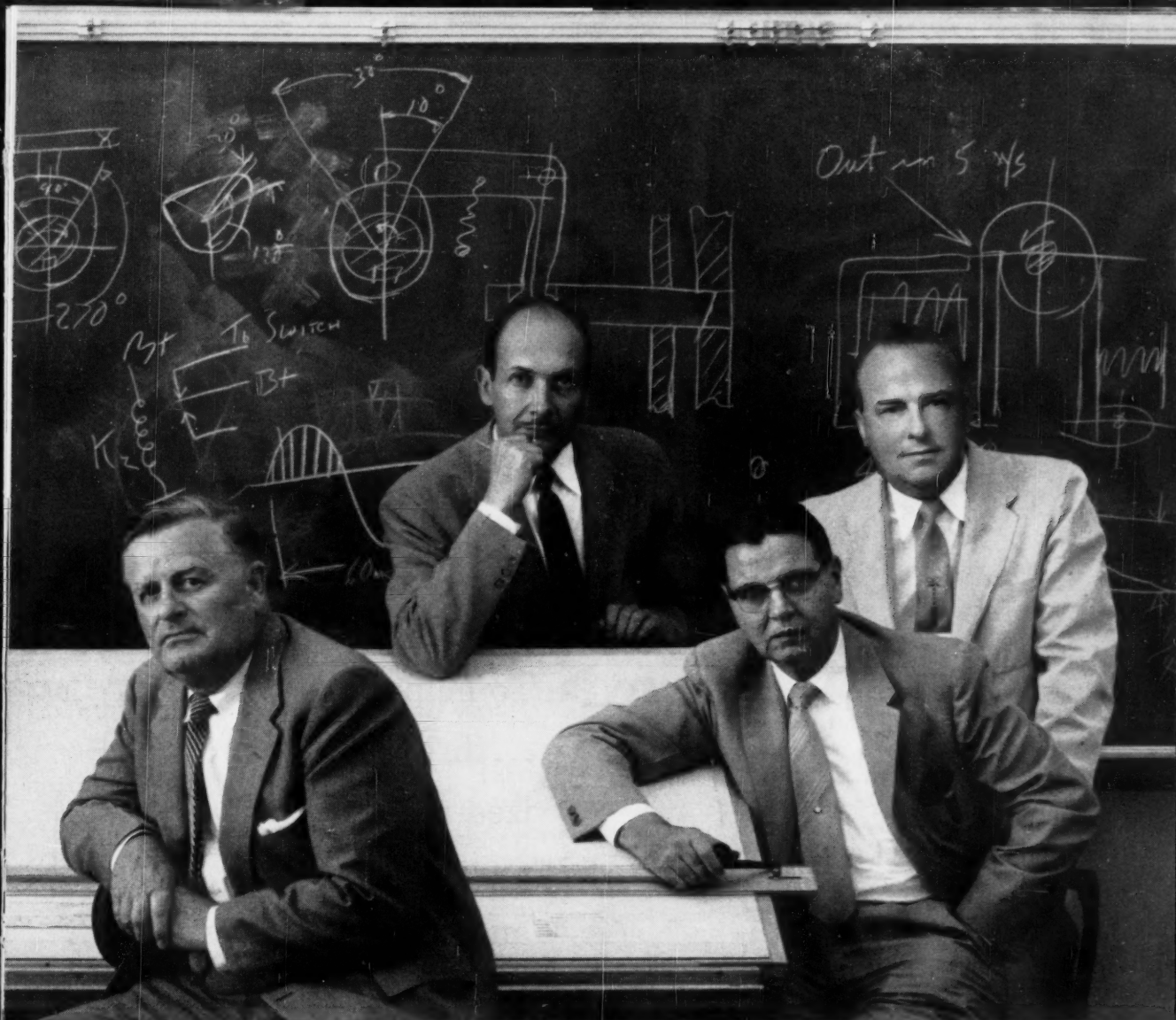
...by producing a family of machines and methods to fit every business



Available soon... new, compact, economical electronic computers and data processors to fit every business.

Here you see nine of the scientists and engineers who direct one of the nation's most versatile pools of product development talent. Experienced in all areas of mechanical, electronic and electro-mechanical business machine design, they hold an impressive list of academic degrees and patents, and have attained wide recognition in their field.

Today by designing a whole family of highly flexible equipment—from electric typewriters to electronic computers—they, and their many colleagues, are turning into products the Royal McBee concept of data processing which is dramatically cutting down the size, the cost, the complexities of modern office automation... speeding the flow of information you require to run a successful business in today's fast-moving economy.



are cutting automation down to size

Automation gets a new look as Royal McBee, alone of all the major business machines companies, offers (1) machines and methods adaptable and affordable to companies of *all* sizes; (2) machines and methods which fit your business as it *stands*...as it *grows*; (3) office automation which is truly the servant of your people, not their master.

The power behind this promise combines (1) Royal's half-century of leadership in the manufacture of typewriters; (2) McBee's 25 years of pioneering in advanced accounting methods; (3) a vigorous research and development program.

Resources at Royal McBee's command include (1) over 12,000 employees; (2) domestic manufacturing plants at Hartford, Conn., Athens, Ohio, St. Louis, Mo., and Ogden, Utah; (3) international plants in Canada, Mexico, Holland and West Germany; (4) distribution in more than 100 countries; (5) over 200 sales-service centers in the U.S. alone.

Present Royal McBee products, by adding new speed and flexibility to your office operations, can today give you true modern management control of your business. They will be joined by others in the months ahead...new machines and methods now under development which will augment the complete, low-cost, adaptable office automation only Royal McBee offers.

ROYAL MCBEE CORPORATION

General Offices: Port Chester, N.Y. Royal electric, standard and portable typewriters; Robotyper, Roytype typewriter supplies; McBee Keysort punched cards and data processing machines; Royal Precision electronic computers and data processors; McBee accounting records, equipment and methods.



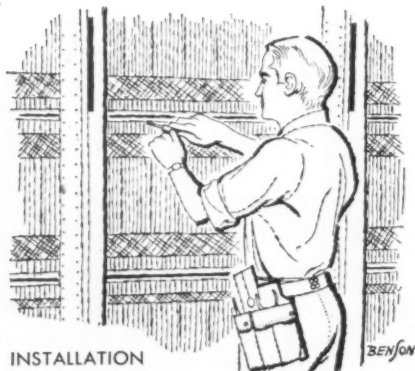
MANUFACTURING



PURCHASING



DISTRIBUTION



INSTALLATION

QUESTION: What is Western Electric's job in the Bell System?

ANSWER: To help make possible ...through highly specialized manufacturing, purchasing, distribution and installation services ... the good, dependable Bell telephone service you enjoy 24 hours a day.

Western Electric

MANUFACTURING AND SUPPLY



UNIT OF THE BELL SYSTEM



7-girl saving... with new PB Mail Inserting Machine

ADVANTAGES

- **Speed**—capacity up to 6,000 an hour. Available in 1-to-4 station models.
- **Accuracy**—automatic detection of errors before envelopes are filled.
- **Simplicity of setting**—can be adjusted to any job in minutes, without special tools or skills.
- **Feeding**—is friction type, handles wide variety of material from invoices and statements to checks and tabulating cards.
- **Ease of operation**—all controls handy on one side.
- **Versatility**—handles widest range of envelope sizes—from 6 by 3 1/4 inches up to 12 by 6 inches; even nests enclosures inside one another while inserting.
- **Compact design**—with straight-line, self-centering feed; all moving parts enclosed.
- **Preferred meter postage** (1st or 3rd class) is provided by an optional hookup with a PB postage meter.
- **Backed by Pitney-Bowes service** from 105 branches, coast-to-coast, in the U.S. and Canada.

This new Mail Inserting Machine can stuff envelopes as fast as eight experienced girls—save as much as \$7 per thousand pieces on some mailings! It gathers, nests, inserts into envelopes as many as four different kinds of enclosures...and closes, seals, counts and stacks—up to 6,000 envelopes an hour! An optional postage meter machine hookup simultaneously provides preferred metered mail postage—first or third class.

PB's new "3100" Mail Inserting Machine replaces costly inserting by hand... obviates hiring hard-to-find extra workers, or the wasteful and demoralizing diversion of office people from their regular duties... avoids the usual hump in overtime to make mailing dates. Mailings can be made more quickly and scheduled more accurately. You can make far wider use of the mails to promote your product or service.

Even one big mailing a quarter may make the "3100" worthwhile! Ask the nearest PB office for a demonstration, or send coupon for free illustrated booklet and case studies of actual savings.



PITNEY-BOWES Mail Inserting Machine

Made by the originator of the postage meter... leading manufacturer of mailing machines. 105 branch offices with service coast to coast in the U.S. and Canada.

PITNEY-BOWES, INC.

1552 Crosby St., Stamford, Conn.

Send illustrated booklet on the "3100" Mail Inserting Machine, and case studies.

Name _____

Address _____





How to avoid going around in circles!

Plant location is a job for specialists.

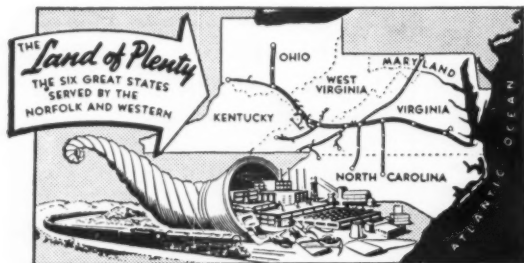
If you're looking for a good site for a new plant, large or small, turn this job over to specialists, just as you'd turn tax problems over to tax experts or legal problems over to an attorney. *For competent assistance, without cost, contact the Norfolk and Western's plant location specialists.*

There are many locations in *The Land of Plenty* offering premium advantages for numer-

ous types of manufacturing. The N&W's experienced industrial location men know their territory and what it offers. They will work for you quietly, reliably, and without obligation. Put your plant location problems in their hands — it's a good way to avoid going around in circles.

Write, wire or call:

L. E. Ward, Jr., Manager
Industrial and Agricultural Dept.
Drawer DR-769 (Phone Diamond 4-1451, Ext. 474)
Norfolk and Western Railway
Roanoke, Virginia



Norfolk and Western RAILWAY

Which of these 4 pictures is the biggest surprise to you

... about rotary card filing today?



1. **USES PRESENT CARDS.** With amazing Mosler Revo-File, no costly transposition is needed. You save an average of \$200 in change-over costs, plus big savings in time, space, money over old-fashioned filing.



2. **REMOVE OR REFILE ONE CARD OR HUNDREDS instantly.** Mosler Revo-File holds cards without mechanical attachment. No wear on cards or clerk. Ups efficiency. Gives real finger-tip control.



3. **CARDS CAN'T DROP OUT.** Mosler Revo-File is the only file of its type that doesn't rely on notched cards that wear out in use. The patented, exclusive belt method of holding records in file assures complete protection against card "fall-out" or wear.



1. **FILING IS FASTER, REFERENCE QUICKER** with Mosler Revo-File as "cards come to clerk" instead of clerk going to cards . . . 68 linear inches of filing capacity in a handsome cabinet only 36 inches long. Available in manual and automatic electric selector models.

* * * * *

For big volume filing Mosler Roto-File can accommodate more than 80,000 cards . . . has all the exclusive features of Mosler Revo-File. Several clerks can work at same time.

Another fine
product of
The MOSLER
SAFE Company



FREE!



HOW TO MODERNIZE AN ACTIVE CARD FILE IN MINUTES.

If you have 3,000 or more active card records of any type or size (including tabulating cards) which are used continuously for reference and posting, mail this coupon *today!*

Department DR-231, REVO-FILE DIVISION,
THE MOSLER SAFE CO., 320 Fifth Ave., New York 1, N. Y.

Please send me complete information on Mosler Revo-File and how to modernize an active card file in minutes.

NAME _____ POSITION _____

COMPANY _____

ADDRESS _____

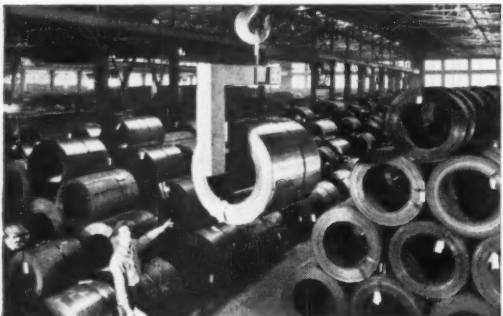
CITY _____ ZONE _____ STATE _____

3 important check points on steel suppliers

FOR MANAGEMENT
CONSIDERATION



In 1917 Ryerson already had 75 years of steel-service experience



A small part of the huge steel stocks at one Ryerson plant



Spark testing Ryerson bar stocks to avoid mixed steels

DEPENDABILITY AND EXPERIENCE—Is your company establishing a sound business relationship with a supplier of steel from stock who will be willing and able to furnish steel at fair prices next year or five years from now under all market conditions? And is your company dealing with a supplier who can give you the benefit of experience gained in working with tens of thousands of other companies whose problems of steel purchasing, selection and fabrication may be similar to yours?

The supplier with the broadest experience is Ryerson—the nation's largest steel-service organization with a 115-year record of dependable performance.

CAPACITY TO SERVE—Consider this recent example: It was 10 after 5 P.M. The phone rang and a steel buyer 80 miles away said: "I've got to have 60,000 lbs. of slit coils first thing in the morning." Impossible? Not at Ryerson. The needed steel was on hand in Ryerson stocks—the nation's largest, by far. Unequalled processing equipment was put to work. And during the night coils of two different gauges were slit to size requirements. Early the next morning the steel was delivered as promised—80 miles away. This kind of service takes great capacity—and Ryerson has it.

QUALITY OF PRODUCT—Mislabelled steel cannot pass skilled Ryerson inspectors who "read" steel sparks to determine carbon content and alloying elements with amazing accuracy. And spark testing is typical of the exacting attention given to quality control at Ryerson. As a result you are sure of getting the third important requisite of satisfactory steel service—steel of known, uniform high quality, accurate in size, gauge, length and weight, and right for your particular application.

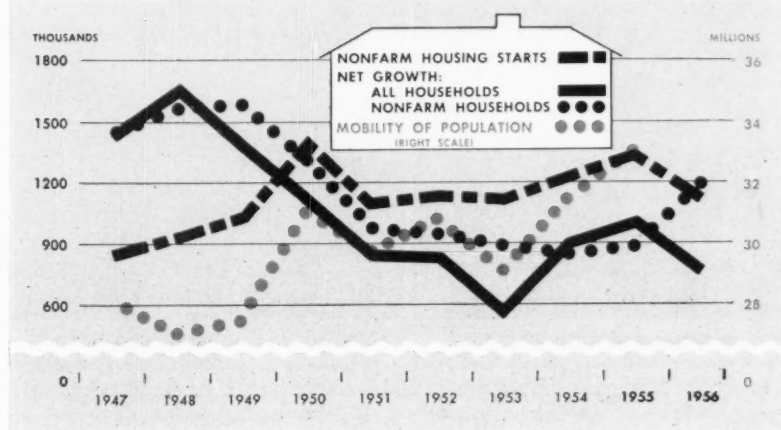
In stock: Carbon, alloy and stainless steel—bars, structurals, plates, sheet and strip, tubing, reinforcing steel—aluminum, industrial plastics, metal-working machinery, etc.



RYERSON STEEL

JOSEPH T. RYERSON & SON, INC. PLANTS AT: NEW YORK • BOSTON • WALLINGFORD, CONN. • PHILADELPHIA • CHARLOTTE • CINCINNATI
CLEVELAND • DETROIT • PITTSBURGH • BUFFALO • CHICAGO • MILWAUKEE • ST. LOUIS • LOS ANGELES • SAN FRANCISCO • SPOKANE • SEATTLE

SOME HOUSING HIGHLIGHTS



Over the past decade, nonfarm housing starts, although exceeding total net household formation, did not match the growth in the number of nonfarm households. Reason: A sharp downtrend in farm households. Meanwhile, internal migration was at a rapid rate. For implications as to future pressure for homes, see "Housing a Depressant?", page 32.

THE TREND OF BUSINESS

AS A WHOLE, business has been trendless recently. Some indicators are up, some sluggish, and the net is difficult to determine. Business conditions, while good, are nothing to shout about. Specifically:

- **Industrial output**, as measured by the seasonally adjusted Federal Reserve Board index, averaged 144—virtually the same as in the second quarter—during July and apparently held close to this rate through mid-August. Not much change is in prospect for September.

- **Business sales**, too, seem to have just about held their own. A slight over-all decline in the seasonally adjusted rate took place in June, with fractional dips in manufacturers' and wholesalers' volume outweighing a gain at the retail level.

Comprehensive estimates for later months are not yet available, but scattered data suggest that retailers, at least, will have a good over-all Summer. July department store sales seem to have set a new all-time high, after allowance for seasonal factors; and spot checks conducted in 66 cities by DUN & BRADSTREET, INC., indicate some improvement over year-ago levels in total retail trade in July and the forepart of August.

- **Net new orders** of manufacturers,

after rising in May, slid off again in June. Most of the decline, however, took place in aircraft. Orders for primary metals rose, while those for other categories did not drop much. Evidence on the trend through mid-Summer points both ways, but, on balance, producers still appear to expect bookings to be higher in the second half as a whole.

- **Unfilled orders** fell in June since the decline in net bookings exceeded that in manufacturers' sales. However, the drop was very modest (less than 1.5 per cent) and at mid-year producers of durables still had heavy backlogs. As a result, moderate growth in (net) new business would insure high-level activity in the hard goods area for a good while.

- **Building contract awards**, in contrast to manufacturers' new order flow, were very heavy, not only in May but in June as well. According to the F. W. Dodge Corporation, the national totals ran 14 per cent above the high year-ago levels in May and 10 per cent above in June. This brought the total for the first half of 1957 to about 5 per cent above that for the first six months of 1956.

The cement stoppage may have had some adverse effect on awards in July but, more importantly, over-

all pressure for new facilities, especially in the area of public works, still remains high. (For a discussion of the trend in actual outlays for construction, see below.)

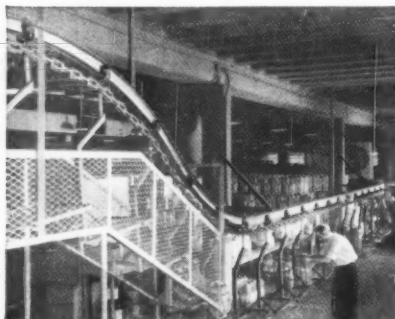
- **Consumer services** continued to enjoy a rising demand in mid-August, and are probably still doing so.

- **Price pressures**, after having abated in many sectors last Winter, rose again in the Spring and early Summer and appear on balance to have stayed on the up-side during August—although some food prices may have declined seasonally then.

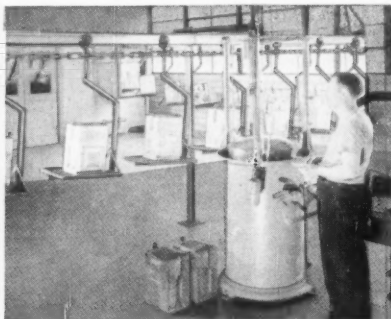
All these cross-currents were reflected in over-all data. Both personal income and consumer spending (seasonally adjusted) seem certain to reach all-time quarterly highs this Summer. Moreover, in dollar terms, the total output of goods and services—Gross National Product—should rise by \$2 to \$3 billion to a peak annual rate (seasonally adjusted) of \$436 to \$437 billion. But the advance in physical product will be smaller. It is true that on a seasonally adjusted basis total employment rose in July, but the gain came from a contra-seasonal rise in farm jobs and increases in other nonmanufacturing lines, while the more highly

continued on page 29

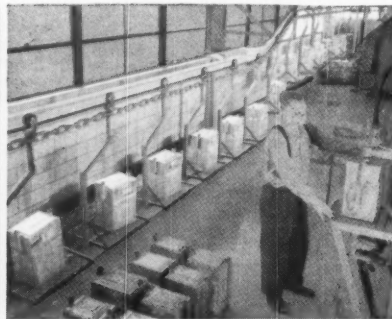
LINK-BELT Overhead Trolley Conveyor coordinates repair, refinishing, inspection



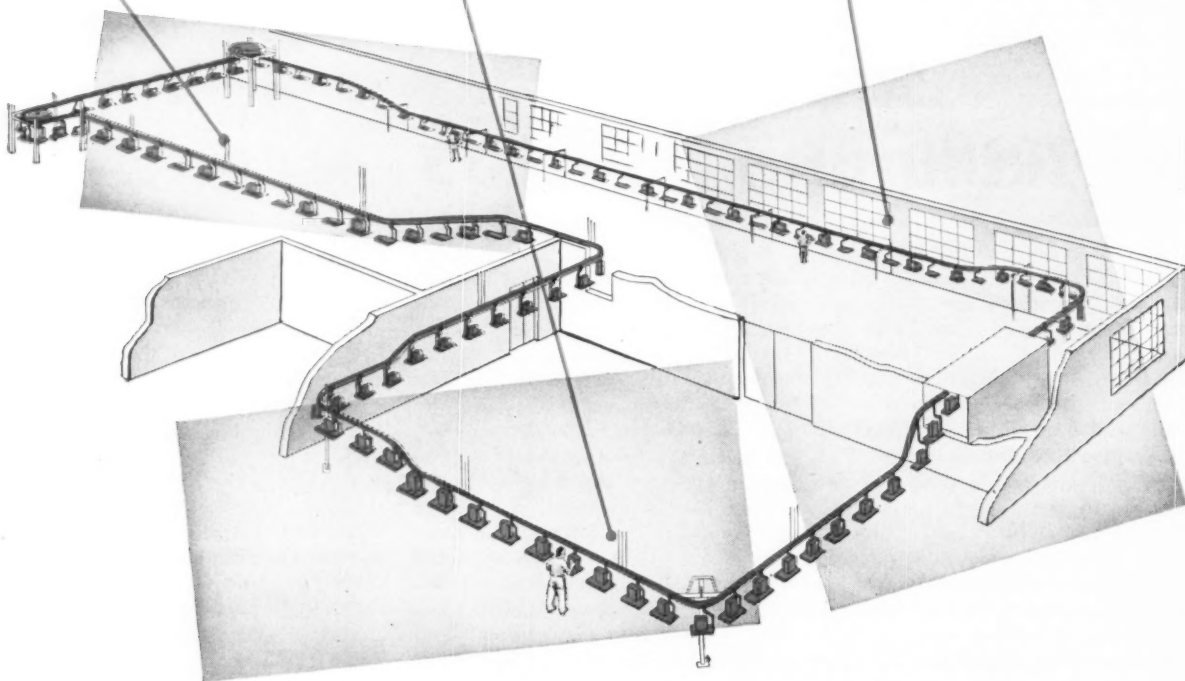
25 SIZES and types of meters are carried smoothly, efficiently by this Link-Belt Overhead Trolley Conveyor. They vary in weight from 17 to 45 lbs., travel on wire mesh bottom carriers.



ROOM-TO-ROOM route of trolley conveyor unites separate processing areas. Meters travel from testing room to washing, checking and repair stations . . . then back to testing room.



EXTREME FLEXIBILITY of conveyor permits dip in front of windows to admit daylight. At aisles and passage ways, conveyor is elevated to clear anyone walking beneath.



Tie scattered processes into an integrated production pattern

APPROXIMATELY 30,000 gas meters are reconditioned each year by the Equitable Gas Co. in Pittsburgh. And to move these sensitive instruments—safely, economically and continuously—through extensive processing, a Link-Belt Overhead Trolley Conveyor is used.

This successful installation is typical of what Link-Belt Overhead Trolley Conveyors can do wherever continuous handling over fixed routes is desired. They put ceilings to work . . . save floor space . . . permit low-cost movement of materials between rooms, floors or buildings . . . improve working conditions and assure effective use of manpower.

Link-Belt can bring this same production-line effi-

ciency to your plant. For complete details, call your nearest Link-Belt office or write for Book 2330.



OVERHEAD TROLLEY CONVEYORS

LINK-BELT COMPANY: Executive Offices, Prudential Plaza, Chicago 1. To Serve Industry There Are Link-Belt Plants and Sales Offices in All Principal Cities. Export Office, New York 7; Canada, Scarboro (Toronto 13); Australia, Marrickville (Sydney), N.S.W.; South Africa, Springs. Representatives Throughout the World. 14,473

productive factory employment fell more than seasonally. At this writing, it appears doubtful whether jobs advanced much more than seasonally, if at all, in August.

Boom in building

Among major sources of strength in the present mixed-up picture, construction looms large. Over-all value put in place reached an all-time high of about \$46 billion in 1956, in the face of a decline of more than 5 per cent in nonfarm residential building. Although housing continued to slide off, total construction advanced further to a seasonally adjusted annual rate of around \$47 billion last May. A moderate rebound in spending on residential structures pushed the an-

nual rate up to \$47.3 billion in June.

Because of the cement strike, total value put in place showed a less-than-seasonal rise in July. But with cement mills back in operation, the seasonally adjusted annual rate of spending probably increased again in August.

By and large, building activity promises to increase in coming months, but all the major segments will not contribute equally to the movement. Outlays for private non-residential structures, which rose more than 8 per cent (seasonally adjusted annual rate) between January and June, will advance at a much slower pace. In contrast, spending by governmental units, after having merely held its own last Spring,

continued on page 31

Why warehouse after warehouse after warehouse is a



Office and warehouse in Butler building with attractive, architecturally-styled front. Side and back walls are metal, for future expansion.

Butler pre-engineered building

We don't mean to be pompous, but more Butler buildings are used for warehouses than any other metal building. Not the cheapest way to build — but the lowest cost way to build well.

Butler steel frames give you post-free interiors up to 100 feet wide. Trussfree gables permit stacking clear up to the roof peak. You get more usable space per dollar. Solid banks of overhead doors can be installed without special construction to support the roof. Protection? It couldn't be better. Fire-safe, maintenance-free Butler metal panels are die-formed. They nest together precisely — shield the contents like a one-piece metal shell. Good insulation is easy. Lighting and ventilation are ideal.

Add it up. It's the lowest-cost way to get a good warehouse. That's a lot to claim, but your Butler Builder can prove it! Call him. He's listed in the Yellow Pages under "Buildings" or "Steel Buildings." Or write direct.



BUTLER MANUFACTURING COMPANY

7417 East 13th Street, Kansas City 26, Missouri

Buildings • Farm Equipment
Dry Cleaners Equipment • Custom Fabrication
Oil Equipment • Outdoor Advertising Equipment

Sales offices in Los Angeles and Richmond, Calif.
Houston, Tex. • Birmingham, Ala. • Atlanta, Ga.
Minneapolis, Minn. • Chicago, Ill. • Detroit, Mich.
Cleveland, Ohio • New York City & Syracuse, N. Y.
Washington, D.C. • Burlington, Ontario, Canada

BUSINESS SIGNPOSTS

1939 Average	1947 Average	Selected WEEKLY Indicators†	Latest Week	Previous Week	Year Ago
102	163	STEEL INGOT PRODUCTION Ten Thousand Tons (a)	212	206	237
25	49	ELECTRIC POWER OUTPUT Ten Million KW Hours (b)	124	121	118
76	121	BITUMINOUS COAL MINED Hundred Thousand Tons (c)	96	97	100
69	92	AUTOMOBILE PRODUCTION Thousand Cars and Trucks (d)	139	138	120
35	98	DEPARTMENT STORE SALES Index 1947-1949=100 (e)	110	104	107
5	13	BANK CLEARINGS Hundred Million Dollars (f)	118	103	113
284	67	BUSINESS FAILURES Number of Failures (f)	222	265	289

1939 Average	1947 Average	Selected MONTHLY Indicators‡	Latest Month	Previous Month	Year Ago
58	100	INDUSTRIAL PRODUCTION Index 1947-1949=100 (e)	144	144	136
58	95	NONFARM COMMODITY PRICES Index 1947-1949=100 (g)	125.6	125.2	121.4
37	100	FARM COMMODITY PRICES Index 1947-1949=100 (g)	92.7	90.9	90.0
59.4	95.5	CONSUMERS' PRICE INDEX Index 1947-1949=100 (g)	120.8	119.6	117.0
3.5	10.0	RETAIL SALES Billions of Dollars (h)	16.7	17.1	15.4
5.4	15.6	MANUFACTURERS' SALES Billions of Dollars (h)	28.3	28.6	27.4
45.8	58.0	EMPLOYMENT Millions of Persons (h)	67.2	66.5	66.7
72.9	190.5	PERSONAL INCOME Billions of Dollars, seasonally adjusted annual rate (h)	345.5	344.8	325.6
103	257	BUILDING PERMIT VALUES Millions of Dollars (f)	555.9	543.9	593.2

SOURCES: (a) Amer. Iron & Steel Inst.; (b) Edison Elect. Inst.; (c) U.S. Bureau of Mines; (d) *Automotive News*; (e) Federal Reserve Board; (f) DUN & BRADSTREET, INC.; (g) U.S. Bureau of Labor Statistics; (h) U.S. Department of Commerce. †WEEKLY INDICATORS: Steel and clearings data for the third week of August; sales for the first week; all others for second week. ‡MONTHLY INDICATORS: Manufacturers' sales for June, all others for July.

ELI LILLY AND STANDARD OIL

thirty years as good neighbors in Indianapolis



I. J. Klingaman, Director of Eli Lilly Purchasing Division, and H. J. Kaufman, Standard Oil Regional Manager, stand before historic building on Lilly plant grounds. The Lilly Company had its beginning in this building more than 81 years ago.

FOR MORE THAN 30 years Eli Lilly and Company and Standard Oil have been industrial neighbors in Indianapolis. Standard Oil supplies petroleum products to this leading pharmaceutical manufacturer's McCarty Street plant and its laboratory at Greenfield, Indiana, a short distance from Indianapolis.

In the course of these years as a supplier, Standard Oil technical service has accompanied the sale of petroleum products. This service has been supplied by men with experience in engineering and in the use of petroleum products. Standard's man currently on the Lilly account is John T. Stark, a native of Indianapolis. For five years, ever since graduating from Brown University with a degree in chemistry, John has been calling at Eli Lilly. He had 17 weeks off this assignment in 1953 to attend the Standard Oil Sales Engineering School, where he received special training in the application of petroleum products.

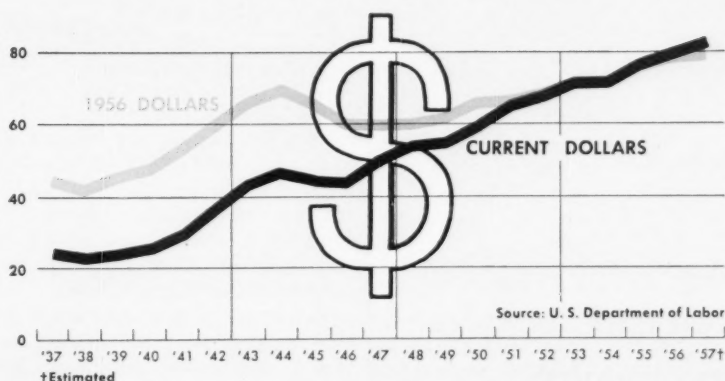
But underneath this relationship between supplier and customer—the technical service rendered, the courtesies given and received, products bought and products sold—there lies something even deeper, something that is very good. It is the respect two industrial companies have for one another, which has endured to mutual advantage for 30 years.

Perhaps your company has been a customer of Standard Oil's for many years. If not, we should like the opportunity to serve you as we have served Eli Lilly. We have 23 division offices in 15 Midwest and Rocky Mountain states. Call any of these offices. Or write Standard Oil Company, 910 South Michigan Avenue, Chicago 80, Illinois.



STANDARD OIL COMPANY
(Indiana)

AVERAGE WEEKLY EARNINGS OF ALL PRODUCTION WORKERS



While average weekly earnings of production workers in current dollars rose almost 1 per cent in the first half of 1957 over those of the prior six months, the level in 1956 dollars fell fractionally. Current dollar earnings of construction workers remained unchanged.

should soon increase significantly.

The trend in housing is almost certain to be upward, but its strength is difficult to gage. Finance is the major uncertainty, since basic demand is quite strong (see story below). A few months of experience with the package presented last month by the FHA will probably be necessary before precise assessment of 1958 prospects can be made.

No zoom for autos

The auto industry has been among the less spirited performers this year, and the near-term outlook is none too encouraging. Through July, sales apparently totaled about 3.54 million—moderately below the number sold in the first seven months of 1956. However, producers held output relatively high in the Spring and early Summer. As a result, on August 1, car stocks held by franchised dealers or in transit stood at 751,000 units (*Automotive News* estimate), against 588,000 a year earlier.

Despite the inventory position, the big companies kept assembly lines busy through August. This might produce a lively clean-up period, carrying 1957 sales beyond their 1956 level. But even so dealers might go into the new model year with large stocks.

What of 1958? Reasons can easily be found for expecting the market then to be stronger than in 1957: the advent of the Edsel and radical

changes in some existing models, run-off of consumer auto debt contracted in 1955, heightening of competition among the Big Three, and growth in the number of middle-income families.

But there are countervailing forces. For one thing, cars will cost more. In addition, some rise in total consumer purchases will be required just to maintain sales of home-produced units, because of the sharp upward trend in imports. And the University of Michigan Survey Research Center's most recent (June 1957) check of consumer spending intentions found plans to buy new cars in the "next year" no more numerous than in June 1956. All in all, it seems rash as yet to expect more than a modest growth in sales during 1958.

Steel doing well

Steel is in for a strong but not a startling year. Output fell more than 3 per cent from the 1956 pace in the first half. Then, untroubled by strikes, producers more than made good the deficit in July and August. Now a nine-month total of around 88 million ingot tons (roughly 6 per cent above the comparable 1956 figure) is in prospect.

Fourth-quarter demand (and thus output) probably will not match the rate achieved last Fall, when heavy post-strike re-pipelining took place. Most forecasters, however, expect

continued on page 32



**He's new here,
OR HE'D DITCH THE MASK AND
COME UP FOR CLEAN AIR!"**

"Don't see many new men here since we got our Wheelabrator Dustube® Collector. Remember how we had to break in new guys all the time when we had to struggle with those masks? Now that the grinders, mixers, furnaces, and the other stuff's all hooded and ventilated and the plant's nice and clean, men don't leave the way they used to. Don't have much absenteeism, either. And I heard the Big Boss say those Wheelabrator people sure know their stuff. He says they gave us the simplest, lowest-cost solution to our problem."

For detailed information on Wheelabrator Dustube Collector principles and savings, write today for Catalog 372-C.

WHEELABRATOR CORPORATION
831 S. Byrkit St., Mishawaka, Ind.

**WHEELABRATOR®
Dust & Fume Control**

will additional cash

increase your opportunity for profit?

*Thousands of companies...of all sizes, in various types of industries...have used billions of Commercial Credit cash to supplement working capital**

Because

1. COMMERCIAL CREDIT's Commercial Financing Plan for manufacturers and wholesalers is usually able to provide more cash than is available from other sources.
2. Money is available continuously (if needed) without negotiations for renewal.
3. Funds are normally ready for use 3 to 5 days after first contact.
4. There is no interference with management.
5. There are no preliminary expenses, no long-term commitments.
6. Cost is minimized since you pay only for cash actually used as your need varies and the one reasonable charge is tax deductible.

For additional facts, contact the nearest COMMERCIAL CREDIT CORPORATION office listed here. Just say, "Send me more information about the plan described in Dun's Review & Modern Industry."

**Consult
COMMERCIAL
CREDIT**

**Capital and Surplus
over \$200,000,000**

Commercial Credit Building, Baltimore 2
222 W. Adams Street, Chicago 6
722 S. Spring Street, Los Angeles 14
100 E. 42nd Street, New York 17
112 Pine Street, San Francisco 6

***COMMERCIAL CREDIT COMPANY subsidiaries, during each of the last several years, advanced over one billion dollars to manufacturers and wholesalers to supplement cash working capital. The 1956 total volume of finance subsidiaries amounted to over three billion dollars.**

orders to be high enough to place the year's total in the range of 115-117 million ingot tons—somewhere between last year's output and the all-time record set in 1955.

Housing a depressant?

The tepid recovery in housing from its sharp slide-off last Winter and Spring has led to much debate. Most analysts still appear to think that the trouble lies mainly in shortage of funds. But there is growing talk that basic demand may be inadequate to support heavier outlays.

Exponents of this view emphasize that during the past decade, as a whole, nonfarm housing starts have exceeded net household formation. They claim that households are now being formed less rapidly than homes are being built and the rate may well continue low until 1960 or later. The conclusion they reach is that home building will be a weak spot in the economy for several years.

This argument has superficial plausibility. However, a look at some key facts casts doubt on its validity.

To begin with, over the period 1947-1956, nonfarm housing starts, while exceeding *total* net household formation, ran below net growth in the number of nonfarm households.

Moreover, from 1954 to 1956, the number of nonfarm families grew at an average rate faster than that at which nonfarm houses will be started this year, increasing almost 1.2 million in 1956. Some drop from the rate may well occur over the next few years. But unless starts rise then, a large one would be required to bring postwar growth in nonfarm households into balance with postwar building by the early 1960's.

Thirdly, there are other good reasons to think that in the calculable future the demand for homes will exceed net household formation:

1. People are on the move. In 1955-1956, more than 33 million Americans changed residence—setting an all-time high in mobility for the second year in a row (see chart on page 27). The more rapidly a given number of households shifts around, the larger is the stock of houses required to meet its demands.

2. It is generally conceded that, on balance, factors which affect our housing stock, other than building itself, will operate to create addi-

continued on page 34



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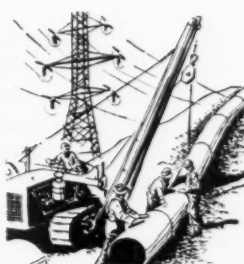
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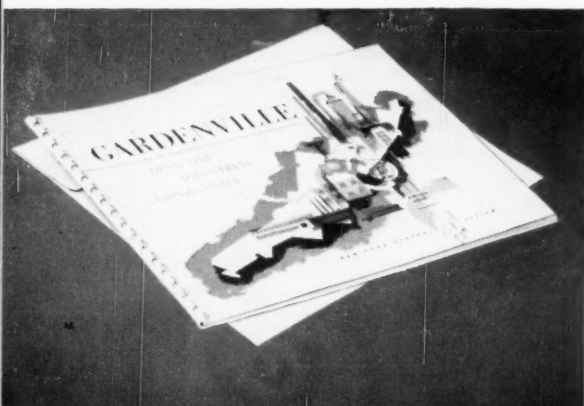
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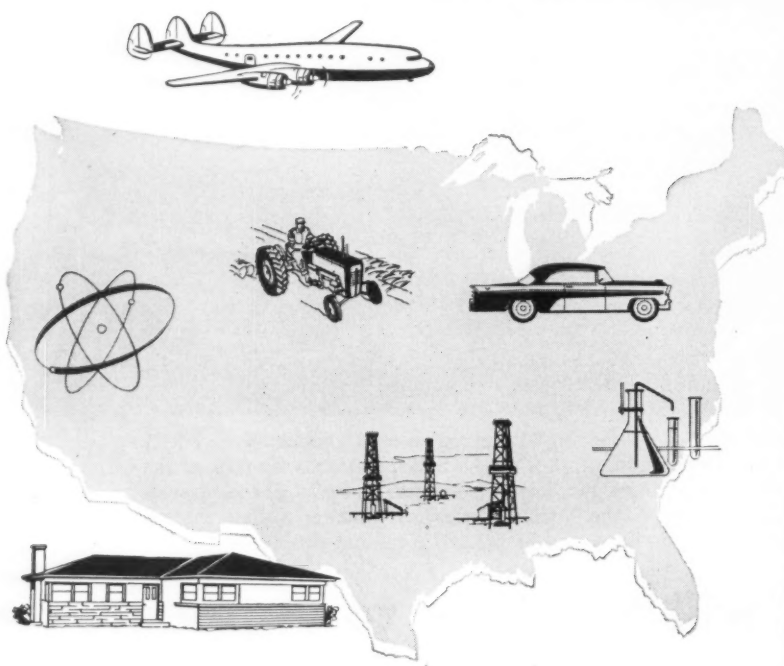
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tional demand for new units. Demolitions and conversion of residential structures to nonresidential use (or to a smaller number of dwelling units) are expected to exceed the conversion of nonresidential buildings into dwelling space and subdivision of houses into more units.

3. As real incomes rise, the number of two-house families is likely to grow.

How much pressure for housing results from all these factors? Direct measurement is impossible, but a clue may be found in Census data on vacancies. Standing at 2.3 per cent in the Spring of 1955, the vacancy rate had dropped to that level again last Spring, even though roughly 2.5 million nonfarm houses had been completed during the interim. Experts commonly believe that a desirable rate would be about 5 per cent under conditions of high-level employment and "normal" mobility, and higher still with recent rates of movement.

Finally, outlays will rise because people are seeking "more home" per unit. Between 1950 and 1956, for example, over-all floor space of the average new FHA-insured house rose more than 20 per cent. And in the latter year, new FHA houses with five or more rooms represented almost nine-tenths of the number built, as against less than one-half in 1950. While the trend toward larger and more costly structures may slow down during the next few years, it will hardly come to a halt.

The same holds true for old houses. Spending for major enlargement and modernization of such units almost trebled between 1946 and 1956, and is now running around \$4 billion yearly. Barring a general recession, it seems reasonable to expect indefinite growth in such outlays at a rate above that prevailing since 1954—over \$300 million per year.

In short: While homebuilding may not really boom again until the mid-1960's, persistent interim growth in housing outlays seems almost certain if general activity remains high and financing is available.

This is a report prepared in the Business Economics Department, DUN & BRADSTREET, INC., by Edwin B. George, Director of Economics, and Robert J. Landry, Economist.

The Profit Squeeze

Many a medium-sized manufacturer finds his earnings are not keeping pace with his increased volume; Yet he can often improve this situation from within

ASK most businessmen today about sales and they beam. Bring up profits and they change the subject. Higher labor and materials costs, greater selling expense — these have taken the bloom off the boom for thousands of companies.

BUSINESS-PAGE headlines report how this squeeze affects large corporations. But it's the smaller outfits who feel it most. Their slimmer profit margins will only stretch so far to absorb added costs, yet price increases are dangerous if the big boys hold the line. Equally bad, lowered retained earnings limit, sometimes even prohibit, needed expansion.

FACED with these facts, more and more companies are re-examining their own operations, searching within for hidden profit leaks. What they find missing is a system of modern management control — fast, accurate reports which enable you to spot trouble *almost as it's happening*, instead of long after the damage is done. Such systems exist, of course, but most of them are too complicated or too costly for small to medium-sized companies...

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WHAT MAKES EXECUTIVES RUN?

ARCH PATTON

It takes more than money to motivate an executive to top performance.

As industry is learning belatedly, bonuses, pensions, and stock options piled on top of record salaries can yield disappointing returns

if the vital nonfinancial motivations are neglected. Here's how a company can provide the maximum incentive for its management team.

BACK IN THE DAYS of the Great Depression, the biggest driving force behind the average executive was the need to hang on to his job. He was motivated by fear, a negative but powerful incentive. With scores of desperately eager candidates for every executive job opening, companies gave little thought to the fine points of executive compensation.

So little was generally known about executive pay levels that, in this respect almost every company was a law unto itself. In the mid-'30's, publication of compensation data by the SEC resulted in a great deal of publicity, but the value of compensation as a management tool was little appreciated until some years later, when the postwar expansion of industry exposed the critical shortage of qualified executives. The resulting scramble to attract and hold outstanding men touched off the executive pay boom that is still with us.

Before-tax increases in executive compensation during the last decade have been little short of sensational. In some industries, top management compensation has doubled during this period, and individual companies report compensation increases, in upper management echelons, in excess of 500 per cent.

Today there is considerable evidence that the boom in monetary compensation as the primary ingre-

dient in executive motivation has passed its peak. Just as the fear motivation of the '30's was replaced in the '40's by a rather primitive financial motivation, this in turn now appears to be undergoing a significant change—partly because financial compensation is progressively losing its force as a motivational tool.

The compensation boom started with salary increases and boosts in pensions. Incentive bonuses and profit sharing were soon added. Then stock options became popular. And more recently deferred compensation and savings plans have come into fairly general use.

As a result, the income of executives in many companies is pushing the limit of after-tax realism. When an executive receives greater income for *not* working after he retires, than he does as a company officer, stockholders may well begin to wonder.

Furthermore, deferred income, which so many current tax-shelter compensation plans involve, provides relatively little individual motivation for its cost. When the reward is so far in the future, its incentive value to the executive is seriously weakened. Finally, quite apart from the tax factor, there is a natural point of diminishing returns in financial motivation.

In effect, industry appears to be running out of devices to whet the executive's financial appetite. Recognizing this, progressive chief executives are taking a fresh look at the whole problem of executive motivation—and finding that the answer lies in more effective use of the vital nonfinancial motivations which have been neglected in the big compensation push of recent years.

What are the key factors in executive motivation? At least six major elements might be identified, of which five are essentially nonfinancial: *leadership, discipline, job challenge, status, competition, and money.*

Each of these motivations, of course, can be well or badly applied. Hitler provided leadership, but not for the good of Germany or mankind. The martinet enforces discipline, but produces mediocrity and conformity. Security is necessary, yet too much security stifles the willingness to accept the risks essential for progress. These motivations are effective management instruments only when they are well administered. None is productive unless top management makes it productive.

The Leadership Motivation

The Leadership Motivation

Unquestionably, leadership is the most important single motivation for any group. Men will die for the right leader.

Leadership is important for another reason: it is the cement that binds all the other motivations together.

Without it, the rest are unimportant.

Everyone knows of companies that pay below-average compensation to their executives, but chalk up decidedly above-average profit increases. This is usually the result of leadership, and the leadership that produces such results consists of many things. Three of its most important ingredients are:

- The ability to set high goals for the company, and persuade individual executives to adopt high performance standards that "stretch" their capacity.

- The ability to organize the efforts of others and correctly assess the productivity of these efforts.

- The ability to spot men who can assume greater responsibility, and provide the opportunity for them to do bigger things.

Exhorting vs. Showing

In general, it can be said that there are two types of leader: the emotional leader and what might be called the "show-the-way" leader. Many of the great company-builders are emotional leaders. They impart an almost religious fervor to the conduct of their business, whether it is designing aircraft or selling insurance. Their companies are characterized by a "close" executive group with an almost mystical belief in the ability of the leader to surmount all obstacles.

The show-the-way leader is a different breed. Whereas the emotional leader generally operates most effectively in a small company environment—and frequently must be superseded as the company attains substantial size—the show-the-way leader is at his best in a big company. Outstanding current examples of this latter type of leadership are Ernest Breech of Ford Motor Company and Ralph J. Cordiner of General Electric.

The basic difference between the two types, of course, lies in their approach. The emotional leader says, "Do as I say, because I know best." The show-the-way leader says, "Here is what we want to do, and the reasons. There are several ways to do this within the framework of our policies. Choose the one that suits you best."

Of course, the show-the-way leader must be sensitive to the critical needs of the company. Here is an example: The new chief executive of

an engineering-oriented concern doing both commercial and military business found that company profits were below industry levels. Shortly after assuming the presidency, he discovered the following opportunities:

1. There was a company-owned research building devoted exclusively to government work. If it were sold and leased back, net income would be increased \$300,000 annually, for working capital needs would be reduced by several million dollars.

2. A substantial proportion of the company's business machines were leased. By switching leased equip-



THE AUTHOR • Arch

Patton has pioneered in the development of effective yardsticks for measuring executive compensation. Several years ago he directed the American Management Association Executive Compensation

Survey, which was in itself one of the first organized efforts to evaluate executive pay.

More recently he has studied the effectiveness of executive incentives in some of the country's leading companies. He has written and spoken extensively on such devices as stock options, deferred compensation contracts, and incentive bonus plans.

Mr. Patton, a principal in the management consulting firm of McKinsey & Company, Inc., was for some years vice president in charge of merchandising and advertising for the Wilbur-Suchard Chocolate Company.

ment from commercial to military work, \$90,000 a year could be added to profits.

3. Double-declining depreciation was used for tax purposes, with straight-line depreciation being used for reporting to stockholders. By switching government contracts from straight-line to double-declining depreciation, nearly \$400,000 annually could be added to net income.

This executive's purpose, of course, was to point up what amounted to financial carelessness. He recognized that the engineers who dominated the company were careful by nature, and he chose this way of gaining their respect and confidence. This was show-the-way leadership at its best.

The Discipline Motivation

Discipline is the element that keeps the executive "team" working toward a common goal. It insures

that individualism is kept within bounds. The U.S. Navy's slogan, "A tight ship is a happy ship," reflects the positive element of discipline.

Fear is implicit in discipline. If the baseball player cannot carry out his assigned role, he is benched. If the Army officer refuses to obey orders, he is court-martialed. If the business executive is unable to carry out his role, he too faces some penalty: promotion may be withheld, his bonus may be reduced, he may even be fired.

Dr. Will Menninger, of the Menninger Psychiatric Clinic, commented during a recent seminar for top executives that "anxiety is a major motivation in producing change." This implies what most top-level executives recognize: that discipline—based on fear, which in turn produces anxiety—is a spur to progress.

Laxness Can Be Costly

The importance of discipline as a motivation is not always understood. The sales department of a major heavy equipment producer had been trying for some months to get a particular attachment designed for the 1957 model. The president had told the engineering vice president that work on the gadget should be pushed. But the head of engineering did not think well of the idea, and consequently nothing was done. Several months later, the company's principal competitor introduced just such an attachment—which it had thoughtfully patented. The resulting competitive disadvantage dropped the company's share of market from 37 per cent to 26 per cent in seven months, and cost over \$1 million in net profit.

The fact that the president took no disciplinary action—not even a bonus cut—against the engineering vice president for this failure has demoralized an already weakened internal situation.

An example of effective disciplinary action was the decision of another chief executive, in a newly decentralized company, to force the early retirement of an executive vice president who refused to delegate authority. The impact of this decision on the organization was electric. Programs that had been lagging suddenly began to move full steam ahead. Opposition to decentralization evaporated quickly, for the president had shown that he would not

tolerate a lack of internal discipline.

Two long-term trends have contributed to the weakening of executive discipline in recent years. One is the shortage of qualified executives—management hesitates to take disciplinary action for fear someone might quit. The second has evolved from the effort to have executives at all levels “participate” in management. This democratic “participation” philosophy is largely an outgrowth of efforts to develop management talent. In some situations, however, it has become tainted by the implication that the company should develop the executive, rather than simply give him the opportunity to develop himself. The effect is to discourage disciplinary action by fostering the notion that the executives are all “one big, happy family”—which suggests that discipline is somehow unnecessary. The fact is—as experienced executives recognize—that a lack of discipline is one of the most serious roadblocks to company progress.

The Job Challenge Motivation

The challenge men find in a job was called by Thorstein Veblen “the instinct of workmanship.” This is not man-against-man competition, but the desire to do an increasingly better job for the sheer satisfaction of accomplishment.

The environment that appears to maximize this motivation is one in which the individual:

- knows what is expected of him; that is, the scope of his responsibility and authority is clear-cut.
- understands that top management expects some mistakes.
- believes his work will be judged fairly and in terms of his responsibilities.

Companies that are most successful in using job challenge as a primary motivation have found that the organization of work is a critical factor. A man who knows what he has to do and controls the elements making for success or failure suffers fewer frustrations—and hence is likely to have greater job satisfaction—than, for example, a man working in a committee-run company who is not sure of the scope of his job.

A recent survey among young middle-management people indicated that their most important single reason for remaining with their current employers was “that the job is inter-

esting and challenging.” And jobs can be made “interesting and challenging” primarily by giving the men who hold them real responsibility.

The Status Motivation

For centuries the church and the military have recognized the importance of status in maintaining authority and consistent leadership. Industry has used status for motivation only in comparatively recent years. A century ago few companies had vice presidents, general managers, sales managers, or manufacturing managers. In the main, owners ran their own businesses, and there was little need for this type of status among the people supporting their efforts.

As industry grew bigger and more complex, new status symbols were increasingly employed. These changes have reflected organizational shifts fostered by a variety of pressures. For example, the position of financial vice president—above the treasurer and controller—developed largely during the salary “freeze” of the war and postwar years. How much of the need for this change was organizational and how much was status-oriented is debatable.

One Way to Status

The decentralization movement that is so widespread in industry today is creating entirely new status relationships and has motivational values far beyond the resulting organizational improvements. It is upgrading the authority of whole cadres of executives and placing the mantle of leadership on the shoulders of many who have not worn it before. Since responsibility appears to make men more often than it breaks them, this is a positive force of great potential.

But many relics of industry’s early lack of status-consciousness remain. The “chief clerk” in the railroad and steel industry generally carries fairly important responsibilities, yet the status implication of the title is such that few capable men seek the job. Although people are the most important asset of a business, the status of the personnel executive in the industrial hierarchy is usually far below that of other functional executives.

Many an executive would rather be elected vice president than receive a \$10,000 tax-exempt raise.

This reflects an almost universal desire for some formal recognition of the individual’s place on the team. Status thus underlies the incentive involved in promotion, for promotion means prestige as well as money.

However, the use of status symbols can create problems. In an effort to develop a feeling of individual responsibility among the heads of its newly decentralized divisions, one large company set them up as divisional presidents and made their functional subordinates vice presidents. But no centralized planning and control mechanism was created. As time passed, the divisional presidents assumed greater and greater independence, with the result that serious interdivisional problems of products and markets arose.

Because of the possible impact on the now status-conscious divisional presidents, top management hesitated to reassert the authority it had, in effect, abdicated. As a result, the company suffered some serious losses in market position before a new chief executive regained proper control over the subordinate units.

The Competition Motivation

World records are rarely set without a stout competitor to “stretch” the athlete beyond his normal capacity. The “four-minute mile” became a reality when Roger Bannister, a good miler, had to become a great miler to win over stiff competition.

This principle holds true in the business world: A good executive develops faster under the lash of competition. Many companies recognize this and organize their activities so that there are several candidates available for every promotion opportunity. If the corollary principle is also applied—that every promotion will go to the best qualified candidate—the executive “stretching” process goes on at all levels in the organization.

Many companies unnecessarily limit their own profits and growth by violating the basic conditions for the development of a competitive environment—as when the business is organized on a one-over-one basis, with a *single* assistant reporting to the manager, or a *single* executive vice president reporting to the president. Similarly, when a company adopts the “crown prince” concept it is violating the spirit of the competi-

continued on page 85



WASHINGTON

AS INDUSTRY'S LEADERS SEE IT . . .

HOW WELL IS THE ADMINISTRATION DOING ITS JOB?

Among other questions answered by business leaders in this

Second Report of DR&MI's Presidents' Panel . . .

- How good a job is Ike doing?
- Should nuclear weapons testing be banned?
- What do business men think of recent Supreme Court decisions?
- Who is the best man for President in 1960?
- Should U.S. trade with Red China and satellites be encouraged?
- Can the Government avert economic crises with present controls?

KENNETH HENRY, *Executive Methods Editor*

GOVERNMENT IN THE United States has moved a long way from the ideal that Emerson recommended a hundred years ago: "The less government we have the better, the fewer laws, and the less confided power." The accelerating transfer of power from the individual to the state has concerned many men—among them a large group of busi-

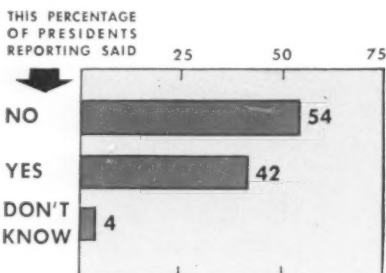
ness men. Having given up so much personal freedom in the cause of national freedom and security, they are disturbed by the possibility that it may later be put to some unwise use. But for business men our times have become, politically as well as economically, less an age of anxiety than an age of uneasy confidence.

In press conferences, at the bar-

gaining table, and on the platform, business leaders often speak in one tone of voice; in private, quite another. Yet frequently some of the more vocal industrial leaders have urged their silent colleagues to stand up and be counted—to speak up with the same conviction as do the labor groups, the farm groups, the voters' leagues. Recently, Clarence Francis,

former board chairman of General Foods, said: "As head of a progressive business it is my responsibility . . . to speak out in behalf of my business and the system of democratic progressive capitalism it represents; to recognize that business leadership is nothing less than a public trust and that an economically strong, free, prosperous, and peace-

Should Nuclear Testing Be Prohibited?



ful America is the responsibility of all."

No more than other men can business men escape the issues and Government acts of our day—the Communist threat, the possible long-range consequences of nuclear testing, whether trade with Red satellite countries should be encouraged, the pressures of Washington's fiscal or statutory restraints, the impact of the Supreme Court's decisions, the quality of the leaders and lawmakers on Capitol Hill. These are all practical matters which shape profits, markets, and growth. Here is how the 112 industrial leaders on The Presidents' Panel view some of these major issues.

Ike: Outstanding or Slipping?

First, how does the Panel feel about the present Administration in Washington? It might be assumed that, after twenty years under two strong and socially experimental Democratic presidents, corporate leaders would feel more content as

we wind up the fifth year under a Republican president. Especially, enthusiasm might be expected from DR&MI's Panel—which, as will be documented later in more detail, is overwhelmingly, though not unanimously, Republican. But these presidents' feelings are mixed, their praise qualified, and the disappointment felt by many of them grave and strongly stated.

Evaluations of the current Administration range all the way from "the best we ever had," "outstanding," and "no more effective leadership in sight" to the complaints "superficial and opportunistic," "has gone New Dealish," and "slipping." But extreme reactions are not typical of the group. More than eight out of ten men are more moderate—and more mixed—in their praise and criticism. About half of these feel that the Administration is generally good, a fifth express some disappointment, and the rest find it satisfactory.

Typical of many of the more favorable comments is that of the president who says he is "strong for Eisenhower, but a little mystified at his budget spending views." Or the similar view that Ike is "doing a reasonably good job, except in policing expenditures." One man, satisfied with Washington's management of domestic affairs, feels that Secretary of State Dulles is "too inflexible and somewhat academic in foreign policies." Other men, after approving the Administration on balance, express "some doubts on foreign policy," or say "still needs strong decisions to protect our country's freedom."

Some of the presidents regard the Administration as "too Keynesian" or "too socialistic," but a larger proportion feel, on the whole, that Ike is "trying to do a good job, but political cross-currents interfere." Other comments express more patience with the facts of political life than disenchantment with the men now leading

HOW GOOD A JOB IS THE

VERY GOOD.....SAY 8%

"Good job done; no more effective leadership in sight."

"Excellent job being done."

"The best thing that has been done during the past generation."

GOOD.....SAY 48%

"Seeking to do an honest job in good faith."

"The President and members of his Administration are working hard to give leadership and establish sound policies of government."

"More liberal than necessary, but generally commendable."

"Doing a good job. Has the opportunity of doing a better one, especially on labor matters and monetary policy."

SATISFACTORY....SAY 14%

"Generally a pretty fair job. Unfortunately, politics is still the motivating force too much of the time."

"Favorable, but am concerned about upward spending curve."

DISAPPOINTING..SAY 23%

"It spends too much."

it: "Trying hard, but a bit too vacillating"; "Honest and dedicated; doing a good job under difficulties"; "Honest, but badly hampered by partisan politics"; "Adequate, but not dynamic or brilliant"; "Not as strong as it started out to be"; "Too few Humphreys"; "Satisfactory, but needs more truly outstanding individuals." (For other comments, see box above.)

Is the Budget Too Big?

The battle of the \$71.8 billion Federal budget has been raging since the President first presented it to Congress and former Secretary of

AMONG the Panel members are the presidents pictured on this and the following pages. Complete list appears on page 140.



BRACKETT PARSONS
Pepperell Manufacturing Co.



R. S. REYNOLDS, JR.
Reynolds Metals Co.



JOSEPH A. GRAZIER
American Radiator & Standard Sanitary Corporation



FRED C. FOY
Koppers Co., Inc.



H. W. STONE
York-Hoover Corporation



GEORGE OLMSTED, JR.
S. D. Warren Co.

ADMINISTRATION DOING?

"Riding two horses at once. Does not appear to have unified direction. Cannot be truly effective if it continues to depend on waning popularity of Eisenhower."

"It has been a good Administration, but since last election it has seemed to be lacking in the aggressive, tenacious leadership necessary to achieve main objectives."

"Disappointed—it is trying to do everything for everybody."

"I am disappointed in its failure to reduce budgetary requirements and to provide tax relief. I am concerned, too, that it has not put into effect more extensively sound management practices. However, its efforts to resist inflation and to reverse the trend toward more powerful Federal government have been encouraging."

"Greatly disappointed—little or no difference from New Deal."

POOR.....SAY 5%

"Modern Republicans resemble New Dealers in their zeal for socialistic planning and international giveaways."

"Incompetent."

the Treasury George M. Humphrey spoke critically of it, later defending it and his own policies in fourteen working days of harassment, from mid-June to mid-July, before the Senate Finance Committee. At another early Summer hearing before the Senate Appropriations Subcommittee, Defense Secretary Charles E. Wilson said: "I don't see why we should cut the defense budget at all. It mystifies me. I don't think the Russians are five feet tall now any more than I thought they were ten feet tall last year." The Panel presidents were asked to cast their votes

in the budget controversy by answering a triple-choice question: "Do you think the present Federal budget is (1) realistic, considering the state of world affairs (2) in need of some cutting or (3) getting out of control?" The smallest group—one sixth of the presidents—thinks today's budget is realistic, but apparently feels some need to qualify this answer. For example, several men, after agreeing that the present budget is realistic "with the exception that we need improved efficiencies," urge that the Administration make "a continuing effort toward reduced cost of Government, as outlined in the Hoover Report."

One president, who feels that the budget is *both* realistic and in need of some cutting, explains his dual vote like this: "In view of the political atmosphere, I think the proposed level is realistic. However, I would guess that every business man who has done business with the Government knows of places where money can be saved. To take the position that improvements can't be made, therefore, is likewise unsound."

Against the one-sixth of the Panelists who think the Federal budget is realistic, an even third feel that it is getting out of control. One man in this group adds: "It got out of control in the 1930's and has never been recaptured since." But the largest number of the presidents—exactly half—feel that the budget is in need of some cutting, as one man suggests, "according to the principles of sound public finance and considering the spending burden which can safely be borne by the American people."

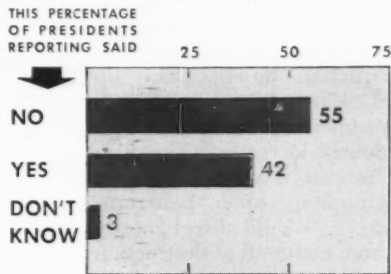
Peace: The Pay-Off

The fact that much of the estimated \$40 billion which the Government currently spends for defense goes to private industry has suggested to some that our prosperity may have become too dependent on defense expenditures. To find out how

the Panel presidents feel on this basic issue, two questions were asked. First, "Is your company doing a significant amount of Government contract work at present?" Second, "If the Western nations and the Soviet bloc should reach a sweeping (and foolproof) disarmament agreement, and the U.S. proceeded to cut defense spending and taxes drastically, what long-range effect do you think this would have on the economy? On your own company's planning?"

Whether or not the companies concerned were doing a significant amount of Government contract work (one-third of them are)—the pattern of answers to the second question was the same. Two out of three men, in the defense as well as the non-defense companies, feel that nothing would make the economy healthier, in the long run, than drastic reduction of defense spending. And, in forecasting the effect of this hypothetical action on their own companies, the presidents split fifty-fifty on whether the results would be highly beneficial or only temporarily

Should the U.S. Trade with China and Red Satellites?



disruptive to their present growth and expansion planning. A few men were noncommittal in both answers, and a scant minority—one in twenty—feel that 100 per cent peacetime production would be a deterrent to the continued growth of the U.S. economy and of their own companies in it. One out of five men says



EDWARD A. DARR
R. J. Reynolds Tobacco Co.



HERMAN W. STEINKRAUS
Bridgeport Brass Co.



ROBERT J. GRENEBAUM
Inland Steel Container Co.



RAYMOND C. FIRESTONE
The Firestone Tire and Rubber Co.



J. W. KEENER
The B. F. Goodrich Co.



CLIFFORD J. BACKSTRAND
Armstrong Cork Co.



D. T. STAPLES
Tidewater Oil Co.

his company would feel no effect at all from such an action. A few—exactly three of the Panelists—see no possibility of greatly reduced defense spending.

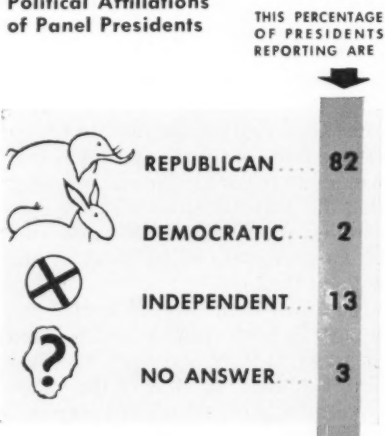
Long-Range Forecasts

There was near-unanimity, however, that the long-range benefits would be achieved only after some temporary displacements and adjustments. Here are some of the predictions the presidents made on the immediate and long-range effects of drastic defense-spending cuts: "A bumpy, but ultimately healthy effect—deflationary"; "Temporary business displacement followed by great growth on a solid basis"; "Would create boom in consumer durable goods, housing, travel"; "Initially cause immediate recession, but then through increased world trade would greatly increase economic activity"; "Very wholesome—more money would be available to the consumer for advanced peacetime pursuits and general purchasing power; companies too would have more for capital expenditure"; "Mal-distribution of labor force, some additional plant capacity; in time, domestic needs such as highway construction could take up slack"; "After initial readjustments would tremendously increase prosperity"; "Serious dislocations, regrouping; some bankruptcies"; "Would divert money from materials of destruction to schools, roads, hospitals, better homes"; "I feel there is virtually no likelihood of this happening"; "Bullish."

Gaging the effects of a drastic reduction of arms spending on their own company planning, the men say: "Would accelerate our expansion and growth pro-

gram"; "Cutback first two years"; "Very little effect on our planning"; "Trying to plan now—major problem appears to be difficulty of unwinding

Political Affiliations of Panel Presidents



large engineering staff"; "Stimulation as result of lower taxes"; "Would temper growth plans—ultimate effect negligible"; "A drastic cutback in our defense production would not seriously affect our future planning, although we could not immediately absorb our displaced defense workers on our commercial output"; "Would likely increase rate of expansion"; "We have planned for both." (For more views, see page 144.)

Red Trade—Or Not

Among the many crucial issues now being debated, both publicly and privately, is whether the current U.S. commitment to diplomatic non-recognition of Red China should continue to include an economic embargo—at least of nonmilitary goods. Secretary of State John Foster Dulles has gone on record with the state-

ment: "Trade with Communist China is used to develop as rapidly as possible a formidable military establishment and a heavy industry to support it." The Administration has also feared that letting either American goods or newspaper men into China may open the way subtly but irreversibly to ultimate diplomatic recognition of Peking. But many have argued otherwise. Henry Ford II, for one, has contended: "We've got to take a new look at our relations with the Communist satellites. I think we need to be realistic and decide whether our trade and aid policy . . . is in our own best interests."

DR&MI's Panel presidents were invited to cast their votes for or against increased American trade with Red China and/or other Communist nations. Here are the results: in favor, 41.2 per cent;

continued on page 135

WHO FOR 1960?

Panel presidents were asked whom they would like to see elected President of the United States in 1960. Two out of ten declined to cast a straw vote for any particular individual, saying that they hoped a "good Republican" or "man with business experience" would become the next U.S. chief executive. One-tenth of the men passed the question by, and another tenth said it was too early to make a choice. But three-fifths of the industrial leaders did write in specific preferences in the straw poll for 1960. Here are the men they picked:

	Number of Votes
NIXON	35
KNOWLAND	7
NIXON OR KNOWLAND	3
NIXON OR GRUENTHER	1
NIXON OR WARREN	1
NIXON OR FULBRIGHT	1
BYRD	2
COOPER	1
COOPER OR DEWEY	1
HERTER	2
HERTER OR SYMINGTON	1
LEADER	1
HUMPHREY	1
KENNEDY	1
MEYNER OR WILLIAMS	1



W. G. ZAENGLEIN
Underwood Corporation



P. B. WISHART
Minneapolis-Honeywell
Regulator Co.



GEORGE P. MACNICHOL, JR.
Libbey-Owens-Ford
Glass Co.



GILBERT W. CHAPMAN
The Yale & Towne Man-
ufacturing Co., Inc.



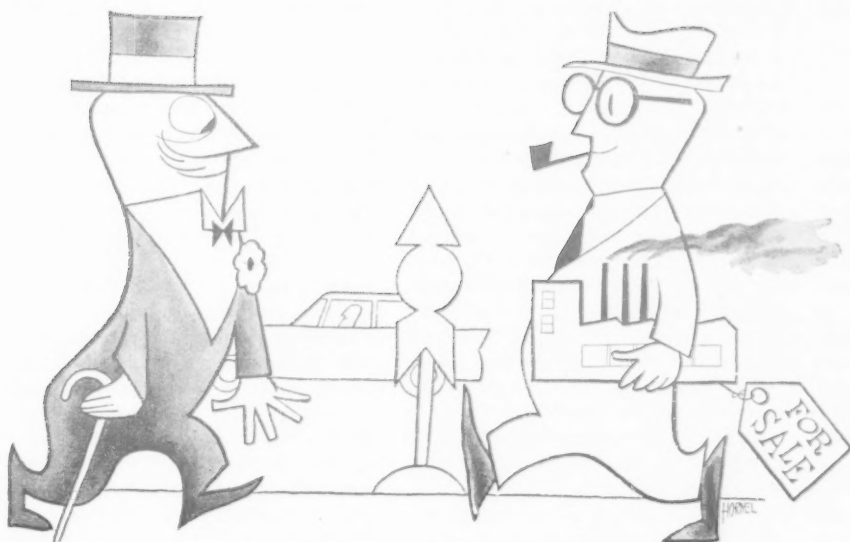
LEWIS GRUBER
P. Lorillard Co.



GLEN B. MILLER
Allied Chemical & Dye
Corporation



J. MARK HIEBERT
Sterling Drug, Inc.



Today, at the height of a record prosperity, businesses are increasingly changing hands. Even if you've no intention of ever putting your own company on the market, you may decide to "split off" a division some day—or you may be approached tomorrow with an offer that deserves serious consideration. Here are the pitfalls to be avoided and the advantages to be sought. . . .

WHEN A COMPANY SELLS OUT

EDWARD R. BAGLEY

● Three years ago, a New England manufacturer refused an attractive offer for his business, although it badly needed working capital and more experienced management. By now, the company has lost almost twice what the buyer offered to pay.

● A small manufacturer sold out to a holding company several years ago for the equivalent of one year's earnings. The business has been returning substantially more than the purchase price to the new owner each year since then.

These are examples—not typical, perhaps, but actual—of what can happen if you don't watch your step when you enter the market with a business to sell, or when a buyer walks up to you with an offer.

And there's a good chance that you will be getting an offer one of these days, if you haven't already. The market for businesses is a highly active one. Up to 1,000 well-publicized major deals are transacted annually. The combined value of the assets that change hands amounts to nearly \$2 billion a year—almost as much as the proceeds in 1956 of all newly issued common stocks. In addition, there are uncounted thousands of less-publicized or unannounced sell-outs of smaller companies. Considering the thousands of sell-outs, the much greater number of negotiations required to produce them, and the many pressures to sell, there are few sizable companies in which the question will never arise.

When your role becomes that of seller, you are automatically at a disadvantage. You will probably sell a business only once, but the buyer you deal with is likely to have been a buyer many times before. Rapidly diversifying companies such as Foremost Dairies, Inc., Olin-Mathieson Chemical Corp., and American Machine & Foundry Co. have bought more than a dozen businesses each in recent years.

This means that the prospective seller needs to have a planned program, founded on a rational analysis of whether or not he really ought to sell in the first place—and if so to what kind of buyer, for what price, at what terms, and when. The seller who makes up his mind on these

points before he goes into the corporate marketplace is much more likely to come out with what he wants.

The Corporate Market

Unlike the stock and commodities markets, where sales of standard items are handled rapidly and impersonally according to regular procedure, the corporate market involves personalized dealing over completely non-standard items and follows no formal procedure whatever. Transactions may be arranged directly by the buying and selling principals. Brokers may represent one or both parties. Or a sale may be negotiated by an investment banker, an accountant, an attorney, or a consultant representing either principal.

It's a highly selective market in which each party is apt to have his own particular trading formula to satisfy. Frequently negotiations must be pursued on a trial-and-error basis. Because published corporate statements are often incomplete and data on most privately held companies is scarce, buyers and sellers often have to grope to find out whether each fits the other's trading formula. Negotiations are further complicated by the need for secrecy. No one wants to divulge confidential information to an outsider with whom a deal may never be consummated.

Personalities play a decisive role. The facts and figures may indicate a perfect corporate match, but if the principals don't get along—even for the most trivial reason—the deal is likely to fall through.

Little wonder, then, that it frequently takes anywhere from five to 30 attempts to complete one corporate sale. In just one year, for example, no fewer than 207 sellers came to Rockwell Manufacturing Co. Only two of the 207 succeeded in completing a sale. Similarly, while over 200 sellers approached the Elgin National Watch Company in a 21-month period, only three companies were actually sold to Elgin.

Before entering this market as a seller, it's wise to take a look at some of the things that could go wrong and lay plans to avoid them.

For one thing, an owner may sell when he doesn't really need to. There are other ways to solve basic business problems besides selling out.

And a number of other hazards exist. If he chooses the wrong buyer,

the seller may later see his company liquidated or badly manhandled for the sake of immediate profits. If he sells on a share of future profits, the new owner may fail to maintain or increase the earnings, and the income the seller expects may not materialize.

Or the price of the buyer's stock that is taken in trade could drop disastrously. The listed common stock of one aggressive acquirer dropped 60 per cent in a recent 18-month period, with consequent losses to those who had been paid in stock for their companies. If the seller plans to remain with the company after the sale, he must make sure he won't find himself subordinated to executives with whom he is completely incompatible.

Still another hazard in a corporate sale is putting too high or too low a price on the business, as happened in the two examples cited at the beginning of this article. Overvaluing discourages worthwhile buyers and may delay a sale that should be carried off promptly. Undervaluing is a mistake for which a seller can expect little mercy, even from the most charitable buyer.

Poor timing is another seller's hazard. An owner may drive his price down if he puts his company on the market in times of tight money, materials shortage, labor strife, or softness in the industry or the economy in general. He should wait for more favorable circumstances if he can. He should beware, too, of impatience. It may lead him to sell out before his earnings record has enough substance to command the best price. A small publisher put his business on the block two years ago, before it had developed real value. Luckily, he was persuaded to withdraw from the market. Now he can command a substantially greater price—and he may not have to sell at all.

Reasons for Selling

Why does an owner sell out? What induces him to part with a business in which he has been the majority stockholder—and perhaps the moving spirit—for many years? Taxes, need for management or capital, changing personal needs and desires, or the existence of a sick part in a sound business—any of these may be a good reason for selling.

If, as a majority stockholder of a business, you find that the taxes

itemized below are preventing you from accumulating sufficient liquid funds to pay estate taxes, you may well consider selling out. Doing this during your lifetime on a planned basis can avert the necessity of a possibly disadvantageous forced sale by your widow and your estate.

Most companies that are sold are owned or controlled by one or a few principals. Under current laws, their estates must pay a Federal estate tax ranging from 3 per cent on \$5,000 to 77 per cent on amounts over \$10 million. State taxes on estates generally take another substantial bite. These taxes must be paid in cash, even if the estate is forced to sell the deceased owner's company to raise it. And it is virtually impossible to forecast accurately what the Government's evaluation of an estate will be. Moreover, there are at least three Federal taxes in addition to personal and corporate income taxes—the gift tax, the accumulated earnings tax, and the personal holding company tax—that may make it difficult to accumulate sufficient cash to pay estate taxes.

Some Tax Advantages

Tax inducements to selling out are found in the lower corporate and individual capital gains tax rates. A corporation can sell out a part of its assets and, under certain conditions, be taxed at a maximum rate of 25 per cent, as against a top income tax rate of 52 per cent. Similarly, the highest personal income tax rate on capital gains is 25 per cent, as compared to the top income tax rate of 91 per cent.

Finally, one of the most important tax inducements is the so-called tax-free reorganization. The seller generally pays no tax at the time of the sale of his business if the transaction involves only an exchange of stock.

If the business lacks sufficient capital, selling out to a better-financed organization may be the best solution. Even in times of easier credit, many businesses cannot raise sufficient capital on the right terms. This factor is important for:

- a new company with heavy initial development expenses, much promise, but little profitable history on which to base an appeal for a loan or for equity capital;
- a company whose rapidly growing sales volume demands more work-

continued on page 108

BUSINESS MEN WITH BRUSH and EASEL



SHORTLY after World War II, when shortages of all kinds were plaguing the nation, a company temporarily unable to take on any new customers decided to devote its booth at a trade show to an exhibit of paintings by business men. The executive in charge thought he would be lucky if he got a dozen pictures to hang; instead, he got scores. And his booth attracted more visitors than any other at the exposition.

The executive who paints for a hobby is no great rarity, despite the popular notion that business men are, if anything, picture-collectors rather than picture-producers. Num-

bers of them not only paint, but paint on a professional level.

Proof, if proof is needed, can be found in a show devoted entirely to business men's pictures, "From the Executive's Easel," which is now on a two-year tour of the country and will be shown at art museums, leading universities, and civic centers from coast to coast. It has already been exhibited in several cities.

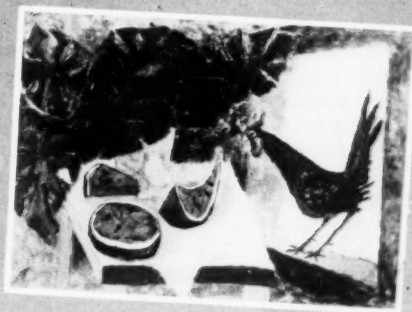
The exhibition is being circulated by the American Federation of Arts. The AFA, which was at first reluctant to associate itself with amateurs, consented to do so on condition the pictures were chosen by museum directors and were worth seeing for their own sake, not merely as curiosities. Selections were made by directors of museums in eight cities from New York to California.

Sponsor of the show is Manpower, Inc., Milwaukee, whose president Elmer Winter, himself a Sunday painter, conceived the idea—though not with the thought of showing his own pictures. Although his work has already appeared in several shows on the professional level, Mr. Winter chose not to be represented in "From the Executive's Easel."

In his trips around the country, Mr. Winter had met a number of full-time executives who were also part-time painters of considerable skill. The idea of an exhibition struck him as a good way of encouraging other executives to try their hand at art (and a good way of improving public relations for Manpower, Inc.).

"As a business executive steps into his office," says Mr. Winter, "his ac-

continued on page 54



Information about these paintings will be found on page 56



First, make sure
you want research,
not engineering

Pick a lab
by quality,
not price



BUYING CONTRACT RESEARCH

An Inside Guide to "Outside" Research

MELVIN MANDELL, *Senior Editor*

THE DAY when industrial research was considered an expensive luxury is past. For a lot of companies today it is a necessity, well worth the dollars spent. Without applied research—carried on within the company or by an outside organization—the flow of new products and processes would soon dry up, and many concerns would be out of business altogether.

Two main reasons may lead a manufacturer to buy research on the outside: lack of the proper research staff or overloading of existing staff. In either case, the company that takes its research problem to an outside organization loses the benefit of retained know-how but gains other advantages.

Dealing with a research organization is a business relationship like any other, requiring mutual faith and respect. The scientists and engineers who staff the independent research organizations are, as a group, all men of exceptional integrity. It is hard to find clients who have felt they were dishonestly or even unfairly treated.

When you buy research, don't expect that a single project will neces-

sarily pay off in new or improved products or processes or lowered production costs. Research means moving into unknown areas, and that is always speculative. But when research does pay, the results can be spectacular—and the more projects you have going at once, the better chance of a payoff.

Let's assume that your company has run into an unusual technical problem: your process is less efficient than a competitor's; or sales are dropping and you wonder whether your plant can produce a different product; or new product lines are causing special technical difficulties among your customers; or your factory is polluting the surrounding air or waters. As a result, you have decided to call on a research organization for help.

Before you even set about picking your outfit, you've got some work to do. First, make sure that you want research and not just technical advice or routine testing. There are plenty of technical consultants and testing organizations available, although such services are also available from most research laboratories.

If your company has a technical staff of its own, have it make an initial technical evaluation—even if you have already determined that its members are unqualified (or are too busy) to do the complete job. This step, by clarifying the problem, will help you select a research outfit—and it will also train your staff for the vital job of liaison with the outside researchers.

If you lack a technical staff, don't be afraid to call in an outside research group to define the problem (a vital step in all research) and help you determine what you want in the way of a solution. Or, you might consider hiring a consultant to make the initial evaluation; later he can act as your liaison man with the research organization. Where the problem calls for a considerable expenditure in a little-known field, you might even consider having one or more research organizations make a technical evaluation or "literature search" (a study of all prior publications in the field, foreign as well as domestic) before letting a contract that calls for actual experimentation.

A number of different types of or-

Buying industrial research is a business relationship with its own special ground rules. Here, both buyers and sellers of "outside" research tell you how to get the most for your money.

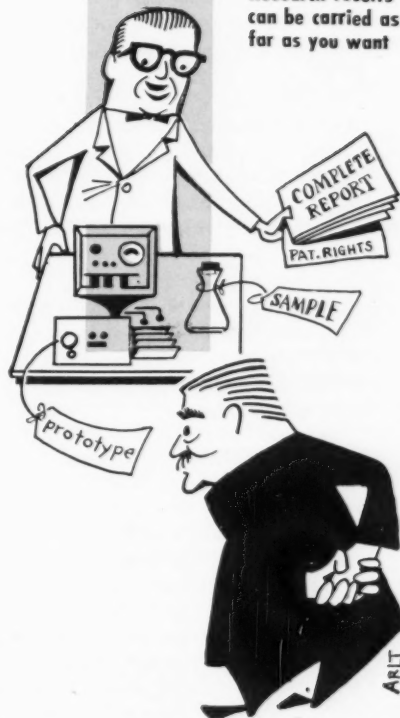
Contracts do not guarantee results



Watch the project, but do not direct it



Research results can be carried as far as you want



ganizations offer industrial research on a contract basis. They include nonprofit foundations, commercial laboratories, college research divisions, and research divisions of manufacturers looking for more work. All operate in roughly the same way.

Picking a research organization isn't easy because each research project demands a different combination of talents and experience. Buying research isn't like buying certain other types of industrial goods, where competitive products are very similar and price is the determining factor. In research, quality is what counts—and quality may be comparatively costly.

Fortunately, research organizations in general are not given to misrepresenting their own capabilities. Few will hesitate to refer potential clients to a rival research organization when it is much better qualified to do a particular job.

Since travel costs will be added to your bill, it is no more than simple logic to work with a group near your plant or headquarters if possible.

If your problem calls for highly specialized research skills and experience in a particular field, the job of selection may be easier. Most research organizations are best known for a particular specialty, although

all offer a variety of experience. Battelle Memorial Institute in Columbus, Ohio, is outstanding in metallurgy; A. D. Little, Inc., in Boston is preeminent in low-temperature studies; Foster D. Snell of New York, a commercial lab, is a leader in surface chemistry; Armour Research Foundation of Chicago is tops in coatings; Stanford Research Institute in California is well known for its skill in electronics and solar energy; Mellon Institute in Pittsburgh is outstanding in the solution of industrial health problems; Commonwealth Engineering in Dayton, Ohio, is a leader in chemistry.

If a particular specialty is required for what is essentially a minor part of your project, don't let this be the major criterion in selecting a research group. Part of the work can be subcontracted if necessary.

If your project calls for considerable use of expensive instruments or computers, you will naturally look first for an organization that already owns this equipment. (Usually the foundations are most elaborately equipped.) But know-how should still be the first consideration, for equipment can always be rented.

Although different research organizations offer varying experience in

different fields, few are completely one-sided. Nearly all offer at least some experience in almost every field because of the widespread breakdown in the traditional scientific boundaries.

Timing may be an important criterion. If you need to have your answer in a few months, some research groups won't touch the job. Most prefer to work on projects that can be scheduled over at least twelve months. Mellon Institute prefers even longer-range contracts (three to five years is their average).

It is best to investigate more than one group in each area of research you are interested in. If your first choice has a similar contract from a competitor of yours, it won't accept a contract from you. Some organizations, like Denison Research Foundation in Powell, Ohio, won't even take work from competitors in widely differing fields of research.

The final criterion is the way the group proposes to solve the problem. When you have narrowed the choice down to two, or at most three, groups, ask each to prepare a technical proposal. Although these proposals (which usually state an estimated cost) can indicate only how the problem will be approached, they are carefully prepared, and the caliber of the proposal is usually a reliable indicator of the brainpower the organization can put to work on your project.

What Goes into the Contract?

Research projects usually involve signing a contract, although some commercial laboratories will start work on a less formal basis. The usual contract or understanding states the amount to be spent over a specified number of months.

What the estimated price in the contract really means is that the researchers won't spend more than this amount without consulting you—and they may quite possibly spend less.

Although the schedule may call for equal expenditures each month, the actual rate may vary. Costs are likely to be lower at the start, because most projects begin with a literature search. When actual experimentation begins, cost will rise—and the rise may be sharp if the project calls for some special device or equipment. Usually the client is not charged directly for instrument time (Battelle does figure this separately), but if

special equipment is needed and little further use for it is foreseen, he may have to pay for it. If so, it becomes his property.

Be Prepared

Dr. Murray Berdick, coordinator of research for Evans Research & Development, New York, recommends that each agreement include a "kitty" for special side tests or studies not directly related to the main project. This will enable your director of research or chief engineer to try out a promising but unexplored idea without having to negotiate a separate contract. If the experiment looks hopeful, it can be made the subject of more extensive experimentation under another contract.

The contract usually includes billing terms. Monthly billing is by far the most common plan, although some commercial laboratories bill weekly—and some clients, like the Government, are billed quarterly. None of the research organizations likes to wait until termination to collect its money, because that calls for financing.

The cost of a single researcher on the doctoral level, including salary and overhead, is at least \$25,000 a year, and rising rapidly toward \$30,

000. Research, consequently, is not cheap. To take one example, Evans Research & Development charges \$4.50 per hour for technicians (including overhead), \$10 per hour for chemists, and \$20 per hour for project leaders. Denison Research charges \$10 to \$15 per hour for top scientists, exclusive of overhead.

The most common method of computing charges is to take direct labor costs and then add an overhead factor, usually 100 to 125 per cent. (Actual overhead figures vary from 75 to nearly 150 per cent.)

How Small a Job?

All research organizations like large long-term contracts, but some will take small unprofitable contracts in the hope they will lead to bigger jobs. Each has some minimum dollar limit on projects accepted, but not all will reveal this figure. Mellon Institute frankly states it will not handle any contracts below \$16,500, its average man-year cost. Most groups will dip as low as \$5,000, and Southwest Research will undertake a job for the startlingly low figure of \$100. (Director Harold J. Vagtborg admits that the Institute is losing money at that figure. The Institute accepts the small contracts because it has a policy of promoting industrial research in the Southwest.)

If you find that a particular research project is going to be too costly for your company to finance alone, look into the possibility of getting your trade association to sponsor it, especially if the results of the project will strengthen the position of your industry.

Cooperative research is growing fast in the United States, although it is not yet so widespread here as in Europe. The American Iron and Steel Institute has already sponsored some \$5 million worth of cooperative research at Battelle and the National Bureau of Standards. The Copper and Brass Research Association has also sponsored many projects. The Alloy Casting Institute spends 65 per cent of its budget on contract research; this has now built up to a total of \$1.5 million.

A sensitive point in the relationship of the research organization and the potential customer is the use made of the technical proposal. Most research groups require the potential client to return all copies of the pro-

continued on page 118

WHERE TO FIND THEM

These reference sources list contract research organizations and the kind of work they specialize in.

- *Industrial Research Laboratories of the United States*, Tenth Edition, 1956. Publication No. 379, National Academy of Sciences, Washington, D.C. \$10.
- *Directory of the American Council of Independent Laboratories, Inc.*, Sixth Edition, 1956. Available on request from the ACIL, 4302 East-West Highway, Washington 14, D.C.
- *Directory of Industrial Research Laboratories in New York State*, 1954. Available on request from the New York State Department of Commerce, Albany, N.Y.
- *Directory of Member Institutions*, Engineering College Research Council. The 1957 edition will be available shortly from Renato Contini, secretary, ECRC, New York University, New York 53. \$2.
- And, of course, your local classified telephone directory (under *Research Organizations*).

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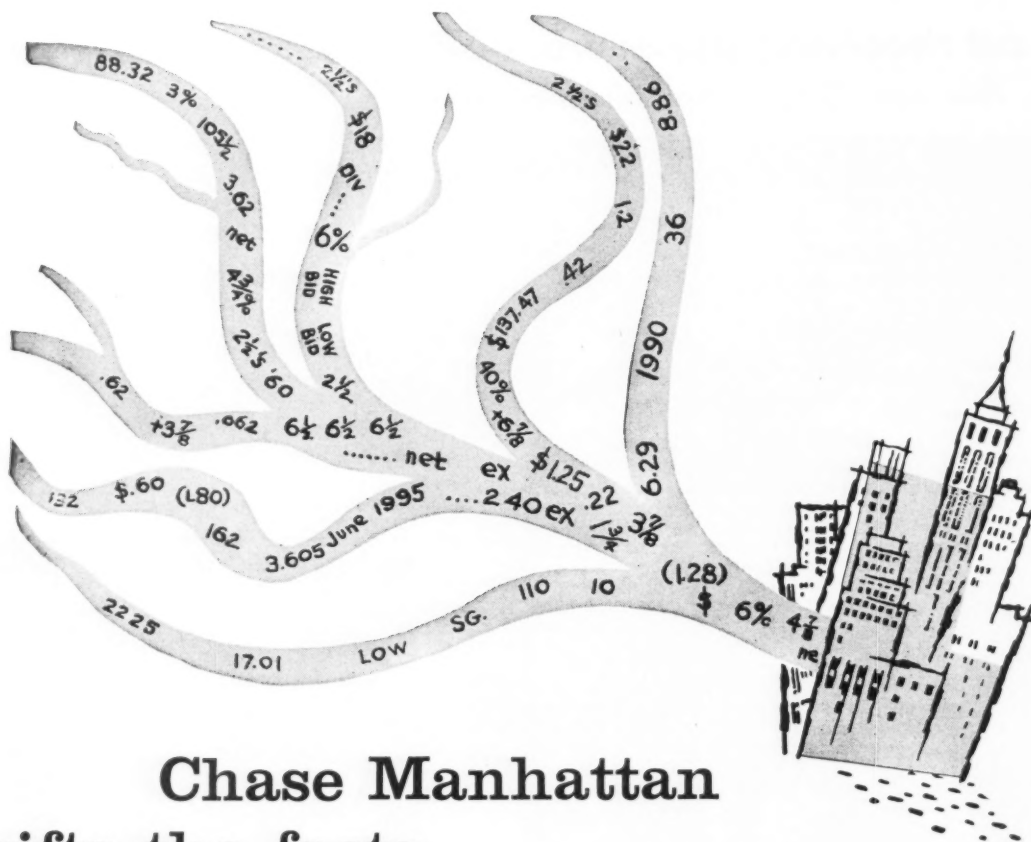
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ATTRACTING FUTURE EXECUTIVES:

What Bait Are You Using?

Small companies as well as large can profit from findings of a new survey

that reveals what graduate business students are looking for in an employer.

"FOR THE GRADUATE, this year will be tops. For the company recruiter, it will be hell."

Five years ago a college placement officer summed up the recruiting situation on the college campuses in those words. Subsequent reports indicate that each year since has brought higher tops for the graduates, and even worse headaches for the company recruiter.

Back in 1952, the average salary offered graduates with bachelor's degrees was \$3,600 a year. In 1957, according to the annual survey conducted by Dr. Frank S. Endicott of Northwestern University, it was in the neighborhood of \$5,000—to say nothing of more and better fringe benefits. Each year more companies enter the competition, and many that have been in the race all along raise their quotas.

The main scramble, of course, is still for engineers, and there are probably few companies that got as many as they wanted in 1957. (One nationally known manufacturer, for example, offered jobs to 1,700 graduates, got only 622.)

But the widening competition is taking in other groups also, particularly those with degrees in business administration. Here, again, many big companies don't get all they want—and smaller companies find themselves coming home from their campus forays empty-handed.

This means serious difficulty for the smaller concern. Small, or moderately small, companies feel that since they have a more difficult competitive row to hoe than the giants, they need to attract and hold exceptional management talent. Some are in crucial need of young executives to back up the top men now and perhaps succeed them later.

One group that has been particu-

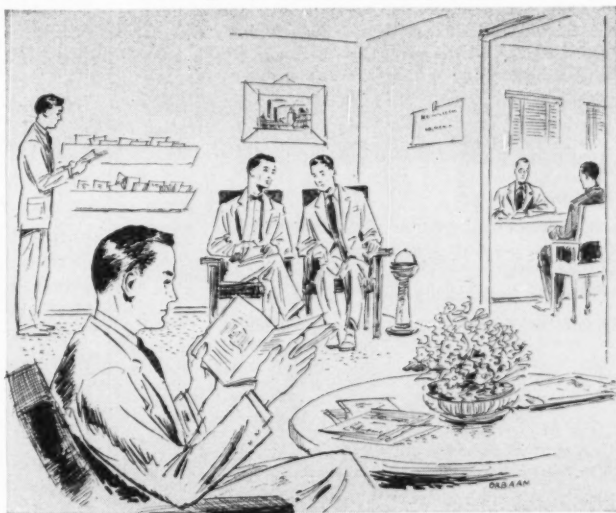
soring a survey among some 450 students at two top graduate schools: Harvard and Northwestern. What could their companies offer the graduate, they wanted to know, that would enable them to compete on more nearly equal terms with the big companies?

As reported by Lyle Spencer, president of Science Research Associates, which conducted the survey, the findings offer pointers for all companies, large and small, that are eager to improve their showing in the competition to attract potential management talent.

Salary, the survey showed, is very important, at least to graduates with advanced degrees—and for excellent reasons. These men are four or five years older than the college seniors; their average age is 26. Many of them are deep in debt for their education. A third of those surveyed were already married. Before

entering graduate school they had earned, on the average, \$325 a month. Once they had their advanced degrees, they were unwilling to consider less than about \$6,500 a year, or about 66 per cent more. And they expected rather rapid advancement: to \$18,000 a year by 1965.

Partly, the importance of salary to these men was noneconomic. "The man who starts off with the highest salary is a Bigger Man on Campus right now than the one who ranks first scholastically," says Mr. Spencer.

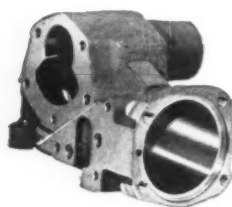


larly concerned about this problem is the Young Presidents Organization, which is composed of men who became company presidents before the age of 39, and who head concerns with current annual sales of \$1 million and up. YPO members, who in the main represent relatively small companies, have found it practically impossible to obtain men with advanced degrees in business administration to meet their growth needs, and they are worried. Recently, they took stock of the situation by spon-

Why MICROHONING

Is Final Stock Removal Process For Interrupted and Blind-End Bores

To secure low-cost, final stock removal, that generates accuracy and functional surface characteristics in a variety of bore conditions, a leading manufacturer of power steering assemblies uses Microhoning. Here are details concerning types of bores and stock removal results obtained by using Micromatic "Know How"—



STEERING GEAR HOUSING—Microhoning consistently corrects cumulative inaccuracies of preceding operations—reduces scrap—permits faster boring—cuts boring tool sharpenings—lowers down-time and tool costs.

Material: Soft Malleable Iron
Bore: 3.125"D x 6.93"L
(Ported bore with 1/4" relief at blind end)

Stock Removal: .002"
Finish: 50 Microinches RMS
Microhoning Cycle: 18 sec.
Preceding Operation: Boring



PISTON RACK—Microhoning answers the need for a final stock removal process that generates a controlled surface finish in the bore of this leaded steel part. Microhoned surface (cross hatch) prevents oil leakage and holds to a minimum the wear of seal that operates in the bore.

Material: Leaded Steel (Rockwell 62 "C")
Bore: .875"D x 3"L
Stock Removal: .005"

Finish: 20 Microinches RMS
Microhoning Cycle: 20 sec.
Preceding Operation: Boring and H.T.



VALVE HOUSING—Microhoning consistently holds size and geometric accuracy—meets stringent surface requirements—assures alignment of four lands in bore. Thus, there is no leakage of oil around control valve which is selectively fitted to its housing.

Material: Cast Iron
Bore: .770"D x 2.18"L
(Interrupted)
Stock Removal: .0025"
Tolerances: Size .0005"

Roundness: .0001"
Straightness: .0001"
Finish: 10 Microinches RMS
Microhoning Cycle: 12 sec.
Preceding Operation: Boring

The principles and application of Microhoning are explained in a 30-minute, 16mm, sound movie, "Progress in Precision" . . . available at your request.

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- ☐ Please have a Micromatic Field Engineer call.
- ☐ Please send Microhoning literature and case histories.

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STREET _____
CITY _____ ZONE _____ STATE _____



MICROMATIC HONE CORP.

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Quite apart from its possible capacity to pay higher salaries, the large company often has other advantages, the survey reveals. The overwhelming majority of graduates, Mr. Spencer reports, want to work for publicly held corporations with more than 1,000 employees and gross sales of at least \$10 million.

Desire for security is a big factor here. The graduates believe that a big company can and always will find the right spot for them at a good salary. They seem confident that if they don't do so well in one job, the benevolent industrial giant will move them around until they reach a well-paying spot that suits them. They are quite content to be part of a team with diffused responsibility. They seem, in fact, to have little stomach for risks in general.

Here the graduates present quite a contrast to the Young Presidents themselves, many of whom are rugged free-enterprisers who started businesses and built them up from scratch. The YPO'ers are entrepreneurs in the classical tradition: drive and hard work are what wins, most of them say, and some mention such points as luck, guts, good judgment, and ability to act in a crisis.

Training Wanted

A disinclination to take risks, however, is not the only reason why so many of the graduates are looking for berths in large companies. Opportunity for training—either formal or through work under capable executives—is another advantage they believe they are more likely to obtain.

On the whole, the attractions that the larger company holds for the graduates seem clear-cut: salary, security, the prestige of a well-known name, training, and opportunity for promotion. Some small concerns, of course, may in actual fact offer more security, better opportunity for training on an informal basis, and a much greater chance to rise in the organization structure. But they will have a hard time convincing the graduates of this, since so many have pre-sold themselves on the virtues of bigness.

What does this add up to for the small- or medium-sized concern? Must it resign itself to losing out in the recruiting race?

By no means. Though the majority of the graduates have a prejudice in favor of size, there is a substantial group that prefers smaller companies

or is open to argument on the point. Here are the attractions which, the survey findings indicate, can sell them on a smaller company:

1. *The chance to own stock equity in the company eventually, without assuming too much risk.* Graduates who prefer smaller concerns think the chances of this are greater with a small- or medium-sized company and a stock plan would be a selling point if it didn't require them to put up too much of their own money.

2. *The possibility of jobs that offer the young graduate an opportunity to gain perspective on an entire operation.* This is something the smaller company can often offer more easily than the large one, and without resort to such more or less artificial means as job rotation. But again, security is a factor—the graduates don't want too much pressure or responsibility until they feel ready for it. The title "assistant to the president" or "assistant to the executive vice president" seems to appeal to them—partly, perhaps, for this reason, but also because of the status factor.

3. *Some sort of continuing executive training program.* If the company cannot start a program of its own, it can offer to underwrite the cost of courses at a nearby university. Mentioning that the company is liberal about picking up the tab for attendance at out-of-town managerial and professional meetings does no harm in interviews, it appears.

4. *Fewer formal channels and less rigidity than larger companies; less opportunity for "getting lost in the crowd."* The men who prefer smaller companies are generally those to whom personal recognition from colleagues and supervisors is of great importance. They also like more diverse duties and a chance to carve out their own jobs.

And if the smaller company can make a case for its growth potential, it will have a particularly strong selling point. To a majority of the students, growth potential is more important than company size, the present profit picture, or even the company's current competitive position in the industry.

Finally, if the smaller company is located near a large city and has only one location, it can stress that point. Most of the graduates prefer to live in or near a city with a population of a half million or more. END

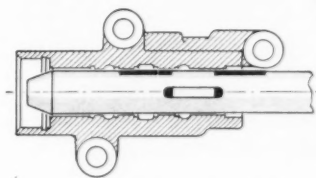
How MICROHONING Cuts Costs—Generates Accuracy—Speeds Production of Interrupted, Blind-End Bores

Shown are two Microhoning machines that are used in the plant of a leading manufacturer of automotive power steering assemblies. Machines are equipped with automatic stone feed and stonewear compensating mechanisms, and automatic sizing controls. A two-position rotary fixture is interlocked with machine controls for fully automatic index cycle. The following applications tell more of the "how".



STEERING GEAR HOUSING—In Microhoning the ported, blind-end bore of steering gear housing a nine-stone tool is used. At least six of nine stones are in contact with bore surface when tool passes over irregularly shaped port. Removing .002" of stock from 3.125"D x 6.93"L bore in 18 seconds, Microhoning generates final accuracies and a controlled finish of 50 micro-inches as specified.

PISTON RACK—In 20 seconds, Microhoning removes .005" of stock from .875"D x 3"L open end leaded steel bore of piston rack. Self-sharpening abrasives assure a consistent generation of specified surface finish of 20 microinches.



VALVE HOUSING—Microhoning tool used for final stock removal in bore of valve housing has one bank of stones and two banks of plastic guides—three stones or guides in each bank. Guides act as tool pilots and stabilizers in interrupted bore—prevent overcutting at edges of lands—assure straight bore by keeping tool aligned. Self-dressing abrasives consistently generate geometric accuracy of .0001" and surface finish of 10 microinches.

Microhoning economically removes stock—corrects cumulative inaccuracies of preceding operations—reduces scrap—permits faster boring—lowers machine tool downtime and maintenance to cut costs and speed production.

Send Coupon for Complete Information

Learn how Microhoning will give efficient stock removal, closer tolerances, accurate alignment and functional surfaces.

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BRUSH AND EASEL

continued from page 45

tivities are more and more regimented. Appointments are made for him on a split-second basis. Seminars, brainstorming sessions, automation discussions, middle management training programs—all consume a major part of the executive's day. Charts, graphs, projections, and budgets restrict his creative ability. He is deeply frustrated by work measurement programs, standardized procedures, and time phasing. He is tiring rapidly and becoming a human Univac.

"It is small wonder, then, that ever-increasing numbers of business men are eagerly turning to painting as an escape from the rigid programs which are part of their daily business lives. For within art there is an opportunity to express oneself without conforming to blueprints and formal patterns. If the executive chooses to paint realistically, or if he prefers to delve into the abstract there is no one to check him by reference to group decision, manuals, or operating memoranda."

Of the 23 artists represented in the show, two are retired and a few are professional men (a lawyer, an architect, one or two doctors), but most hold executive posts in business and do their painting on weekends and vacations and at night. They include retailers, manufacturers, hotel men, the executive vice president of an insurance company, the president of an advertising agency, an oil man, a building contractor, a geologist, and a real estate broker.

Some originally planned careers in art but were drawn into business. Others took up painting comparatively late in life, studied as they went along or had no formal training at all.

American Primitive

Oldest artist in the show is Leo Schutzman, 78, retired president of the Victory Undergarment Company of New York, who has been called an "American primitive," and who has received encouragement from that most famous of American primitives, Grandma Moses. Mr. Schutzman enrolled in the Brooklyn Museum School of Art after he retired; up to that time he had been interested in art but had never tried it on a do-it-yourself basis.

The president of the B&B Equipment Company of Dallas, Texas, R. Bonner Bentley, started considerably earlier in life than Mr. Schutzman, but still comparatively late. He began three years ago when he was 40, and has studied at the Dallas Museum of Fine Arts. He is represented in the show by two oils, "Rooster and Melons" and "Lobster and Clams." The last was a hazardous job; while the clams were naturally docile, the lobster-model bit him.

After-Midnight Painter

Youngest of the artists is an attorney specializing in workmen's compensation cases, 29-year-old Angelos Poulakidas of Chicago, who lives in a four-room apartment and paints after midnight in the dining room. He started four or five years ago, when someone gave him a small box of oil paints, and has had no formal training—in fact, one critic told him he would be spoiled if he took lessons. He is also exhibiting two oils, "Interrogation," and "Organ Grinder."

Ben L. Culwell, 38, Dallas, Texas, executive vice president of the Southwest General Insurance Company, also got started with a gift box of paints but at a somewhat earlier age; he was only eight years old at the time. He studied in New York for a year, has had a one-man show at the Dallas Museum of Fine Arts, exhibited in "Fourteen Americans" at the New York Museum of Modern Art, and at the Dallas County annual art exhibit. Two of his oil and duco pictures, both untitled, are in the show.

Werton Dee Moore, 62, owner of a chemical company in Tulsa, Okla., took up painting almost by chance. He had some unexpected leisure when he was quarantined in his home because his daughter had scarlet fever. That was 30 years ago; he has been painting ever since, and now has about 500 pictures to his credit. He is entirely self-taught.

Artist into Sales Manager

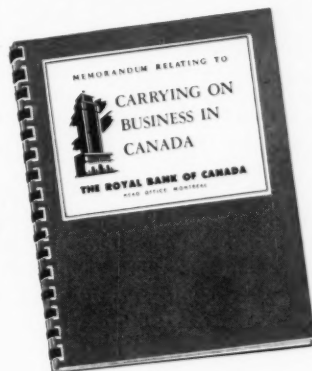
Milton P. Mathewson, 54, started out to be an artist and took a job at the LaSalle Hotel in Chicago to finance his studies. Now he's the hotel's sales manager and paints as a hobby. He has two pictures in the show, "Sundown" and "Shipwreck."

One of the artists has won a long list of awards at regional art shows around the country, and has had pictures accepted in national art shows



what every
businessman
should know...

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Every year more and more American firms are establishing—or expanding—operations in Canada. And while it is just as simple to do business in Canada as in the United States, certain differences—of vital concern to the businessman—do exist.

The Business Development Department of The Royal Bank of Canada—organized to provide assistance to businessmen—has just issued a revised edition of "Carrying on Business in Canada", a factual memorandum which serves as an excellent guide to any individual or concern planning to establish a business in Canada.

For example, under TYPES OF ORGANIZATION you will find how a Limited Liability Company may be incorporated under a Federal or Provincial charter as a Private Company as distinct from a Public Company... A section is devoted to BRANCHES OF FOREIGN CORPORATIONS... and SOLE PROPRIETORSHIPS AND PARTNERSHIPS. The chapter on TAXATION (Income and other business taxes) covers Federal and Provincial Corporation Taxes, Corporate Distributions, Special Corporations which are afforded special treatment under the Income Tax Act. Also Unemployment Insurance and Workman's Compensation... Personal Income Taxes... Succession Duties... and other pertinent information.

Anyone planning to do business in Canada will find this book of much practical help. For a free copy—without cost or obligation—fill out and mail the coupon today.

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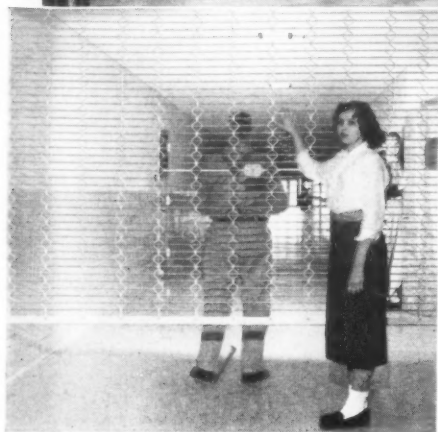
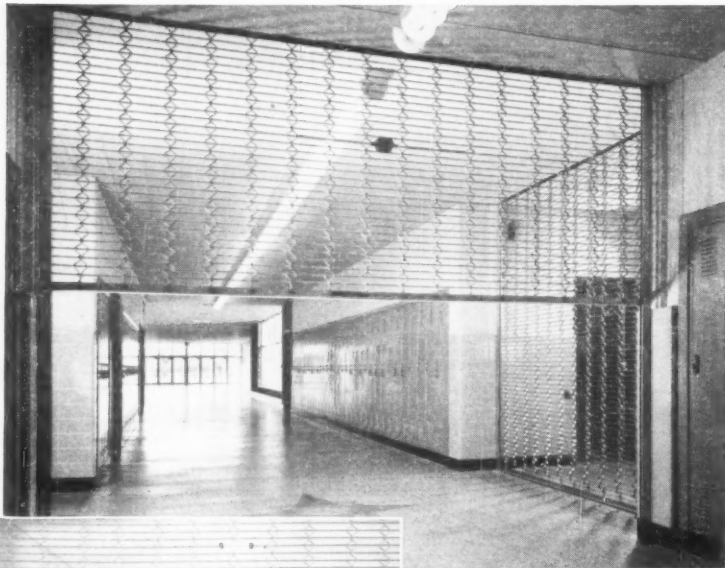
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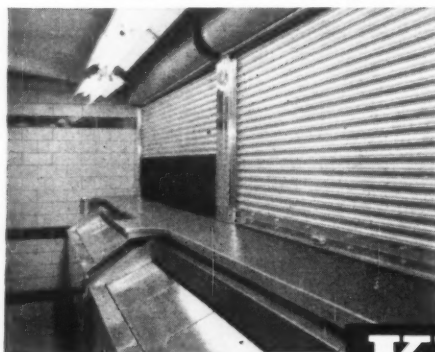
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ABOUT THE PAINTINGS ON PAGE 45

Top, Left: FORMS by Arthur Rissman, president, Jerrems, Chicago. Mr. Rissman originally planned to teach art and literature on the high school level. The deaths of his father and brother, however, forced him to take over the family clothing store business. He has exhibited at the Chicago Art Institute and The Artists Equity Show at the Associated Artists Gallery.

Top, Right: ROOSTER AND MELONS by R. Bonner Bentley, president, B&B Equipment Company, Dallas, Texas. Mr. Bentley has been painting only three years, but received favorable critical notices when he exhibited in student shows and in the Dallas County Annual Show. He is an alumnus of the Harvard Graduate School of Business Administration.

Bottom, Left: THE WEDDING by Leo Schutzman, Brooklyn, N.Y. Mr. Schutzman didn't even try to paint until he retired a few years ago. This painting has also been exhibited at the Brooklyn Museum of Art.

Bottom, Center: SAN FRANCISCO CHIMNEYS by Dr. Frank Hinman, Jr., San Francisco. Dr. Hinman, who has had no formal training, paints only on weekends. His vacations he reserves for his other hobbies, which include fine cabinetwork.

Bottom, Right: MARKET PATTERNS by Byron L. Levy, president, Alcoa Paper Company, New Orleans. Mr. Levy polished off his degree in mechanical engineering, then went to special evening courses in painting at Tulane University. He now uses a converted garage as a studio.

in New York and other cities. He is E. George Rogers, owner of the Evangeline Hotel in Alexandria, La., and vice president of the First National Bank of Naples, Fla. He had some early art training, but spent most of his business life as a certified public accountant. When he retired from accounting in 1947, he spent four years studying at the Florida Gulf Coast Art Center. Now he carries a sketchbook with him on every trip he takes, and works from this at home later.

Though full-time artists are frequently attracted by industrial scenes, the business men artists seem to prefer landscapes, people, still lifes, or even abstractions. "San Francisco Chimneys," about the closest approach to an industrial subject in the show, is the work of a surgeon, Dr. Frank Hinman of San Francisco.

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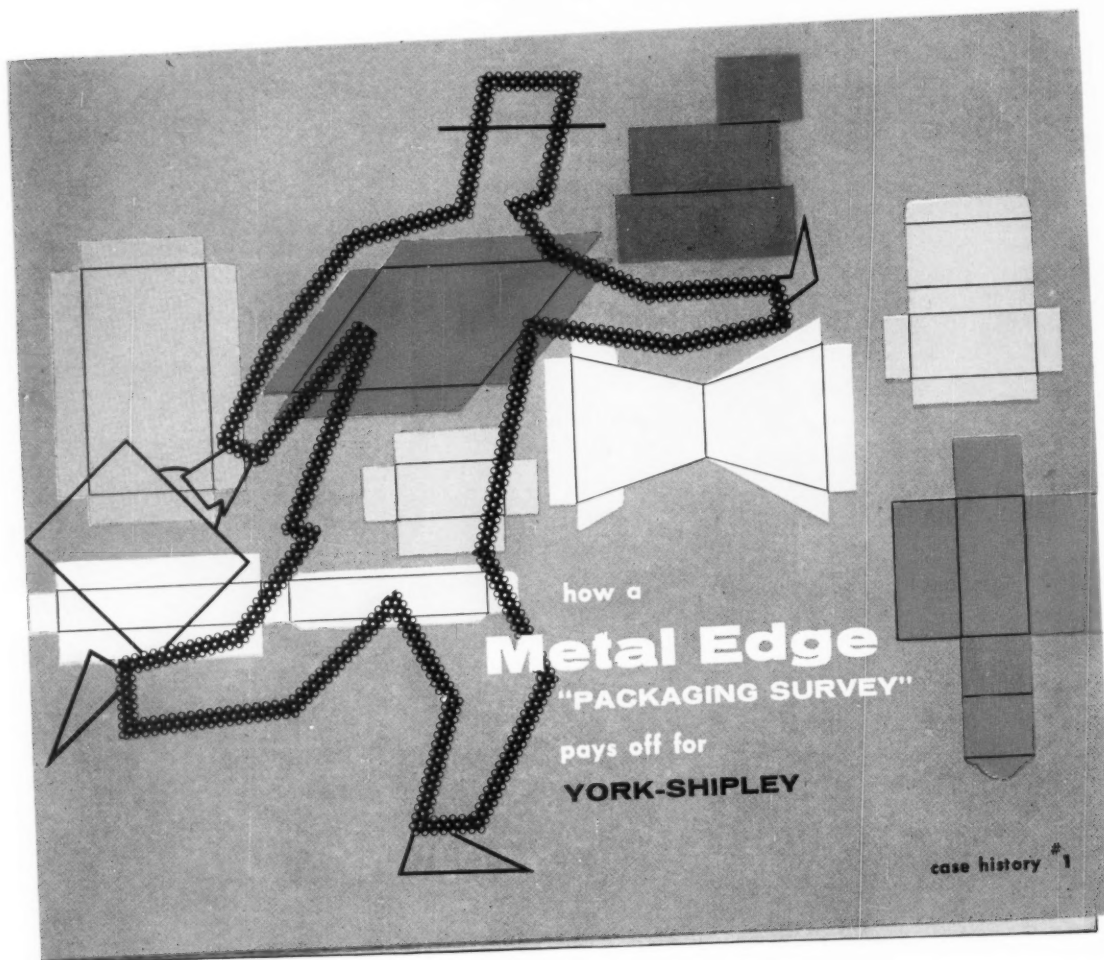
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NEW TRENDS IN PACKAGING	67
101 WAYS TO IMPROVE YOUR PACKAGE	76
PACKAGING IN THE ATOMIC AGE	84

PACKAGING: Industry looks ahead

ANNESTA R. GARDNER, Industrial Editor

In packaging, change is the order of the day. Here, to guide your planning, is a summary of the current trends, plus a preview of things to come.

WHEN 1960's big selling season starts, will your product still be wearing the same wrap it's wearing today? If so, it may be as out of date as 1920's flapper.

A survey just completed by DUN'S REVIEW AND MODERN INDUSTRY shows that a sizable majority of manufacturers in industries as diverse as food and fasteners, lathes and lingerie are

planning major changes in package styling, type, and materials in the next few years.

Why are they planning these changes? The biggest reason, of course, is to increase sales. A good many of the changes—in materials as well as package styling and package type—are aimed at gaining greater display for the product. (More than

a third checked this as a major reason for packaging changes.) There are many specific mentions, too, of the need for greater company identification. But these are by no means the only reasons. Almost as many companies are after reduced packaging and handling costs and greater product protection as are looking for increased sales appeal.

The emphasis on reduced handling costs is particularly noteworthy. Says a manufacturer of structural iron work: "We have changed from tape to steel strapping so that we can produce larger shipping bundles, thus reducing the number of lifts required when loading material for shipping; at the same time, we are changing the design of our products so that they will nest together more closely and make it possible to utilize the full capacity of our loading crane."

Says a manufacturer of furniture hardware: "We used to make local deliveries unpackaged. Now, we expect to crate our products to simplify handling and conserve storage space for ourselves and our customers."

A producer of sports clothing says, "Our stock is, at present, tied rather than packaged. But we hope that new packaging materials now becoming available will permit us to

What is a package?

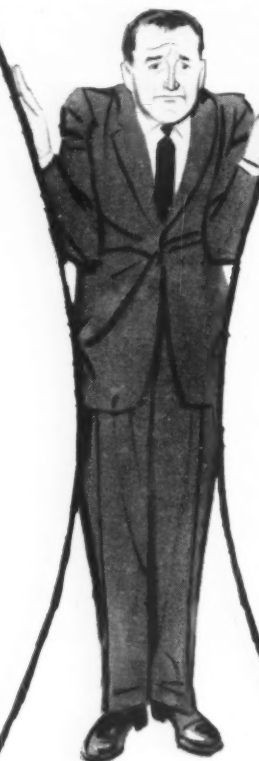
A package is a box, a piece of paper, a plastic bag, a glass bottle, a band of steel. It may be a complex laminate or a simple wrap. But if it protects, confines, or covers a product on its trip from production line to ultimate consumer, it's a package.

In some cases, a package is the only chance a company has for product and brand identification. You can't print a company name on a liquid or on a pile of flour—and you can't put a tag on them, either. For other companies, the package may not be essential for identification, but it still serves many important purposes. The fact is, almost every company packages its products—whether it recognizes that fact or not. And too many companies do not recognize it. To them, the cover or band they

place on their product is not a package at all—just a cover. Indeed, several companies that replied to our survey said "We do not package"—and then went on to describe rather elaborate systems of padding, wrapping, and tying that were in actual use. A package by any other name may be just as good a package; the trouble is, the company which does not recognize its packages as such probably also does not recognize what packaging really costs and what opportunities it presents to gain better display for the product and the company name and to reduce product damage.

Packaging is important to you—whether you make a consumer product or an industrial machine. The following pages show how and why.

"DUST LOSSES HAD US IN A SQUEEZE"



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Pangborn Dust Control can cut *your* costs—lower housekeeping expense, increase machinery life, improve working conditions, salvage valuable material, offer many other benefits. If dust has you in a squeeze, write for Bulletin 922 to: PANGBORN CORP., Hagerstown 4, Md. Manufacturers of Dust Control and Blast Cleaning Equipment.

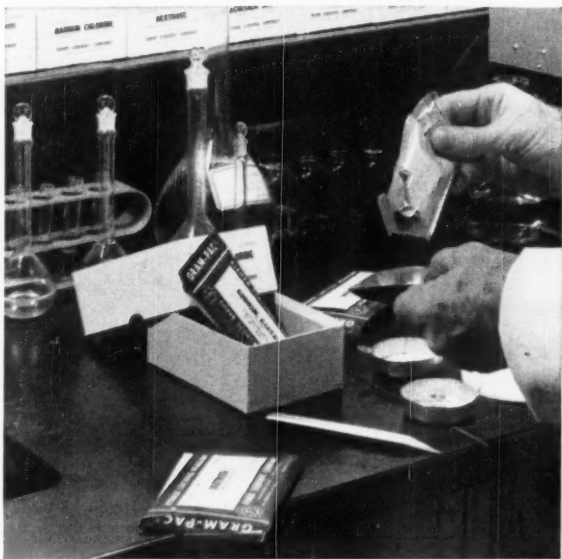


Aerosol packages are gaining popularity in industry as well as at the consumer level because they combine convenience of use with product protection. Industrial packs now include mold-release agents like this, lubricants, touch-up paints, and flow-detection powders.



Barrett Division, Allied Chemical & Dye Corp.

Pre-weighed materials in unit packages also save time and effort, prevent product contamination. Users are more than willing to pay a premium to obtain chemical reagents and other materials in this convenient form. The packages shown here hold gram weights.



Fisher Scientific Company

Carry-out containers, already popular in the consumer field, are now moving into industry. Users like their convenience; manufacturers like the fact that they promote multi-unit sales. Grease gun cartridges themselves are new. They are one-pound, throw-away containers.



Hulburt Oil & Grease Company

package our products and enable us to completely revise our handling and storage system."

As the statistical analysis of the survey (page 62) shows, more than half of the respondents plan major changes in package styling in the next few years, and nearly half expect to be using new packaging materials. (The survey, incidentally, covers replies from more than 250 companies, but the statistical analysis is confined to those who answered all of the pertinent questions—just under 200.)

It is not surprising to find style changes at the top of the list. Styling is, after all, easiest to change, and it is an area in which fad and fashion play a major role.

Just two years ago, for instance, one New York packaging firm that specializes in high-style containers found less than 30 per cent of its customers wanted foil-covered packages. Now over 70 per cent want them.

But it is also true that manufacturers of other types of products are becoming more style-conscious. At a recent meeting of the Package Designers Council, for example, speakers noted that package users are beginning to ask such questions as:

How can the design of the package itself be better fitted to the product it holds?

Should packages be redesigned regularly like automobiles, even if they are successful?

If so, how often should the job be done?

Should design changes be gradual or radical?

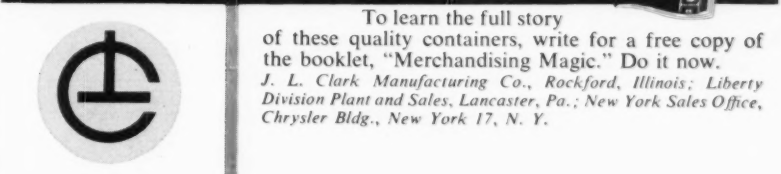
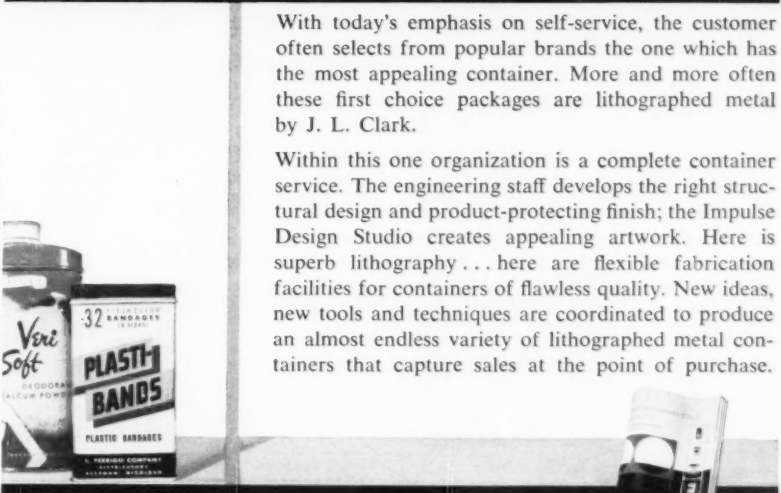
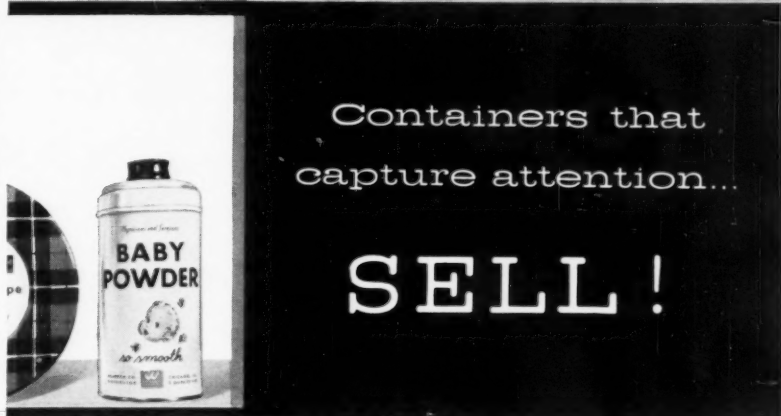
When it comes to materials changes, the major trend is, rather obviously, from textiles, metal, and wood to paper, plastics, and fiberboard.

But the trend is by no means all in one direction.

A producer of organic chemicals is changing from paper bags and fiber drums to metal tote bins "because they permit outside storage of materials which previously, because of the package, had to be stored inside."

Likewise, while several companies plan to increase their use of plastic films and decrease their use of cellophane, others are going in the opposite direction, and still others plan to increase use of both materials. And, to fill the gap left by those who are

text continued on page 63



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WHO IS CHANGING?

What kind of companies expect to change package styling, type, and materials in the next few years? Here's what the survey shows:

Of the manufacturers in this group	This percentage are now planning package changes
Fabricated consumer products	75
Food, drugs, and chemicals	90
Clothing and textiles	75
Machinery and industrial supplies	72
All respondents	79

WHAT ARE THEY CHANGING?

Of the manufacturers in this group	This percentage plan to change		
	Package styling	Package type	Packaging materials
Fabricated consumer products	49	28	44
Food, drugs, and chemicals	72	42	40
Clothing and textiles	50	56	31
Machinery and industrial supplies	45	30	44
All respondents	55	35	42

WHY ARE THEY CHANGING?

Of the manufacturers in this group	This percentage list as major reasons for change:				
	Increase sales appeal	Standardize packages	Reduce packaging costs	Reduce product damage	Reduce handling costs
Fabricated consumer products	51	20	33	28	29
Food, drugs, and chemicals	72	13	33	18	42
Clothing and textiles	56	12	6	13	21
Machinery and industrial supplies	35	24	45	27	44
All respondents	52	19	36	25	38

changing from some of the older materials to newer ones (wood boxes to fiberboard cartons, for instance) there are companies entering the packaging field for the first time—companies which never packaged their products before—and adopting the older, better-established types of containers for their initial designs.

Taking a broad view of the survey replies, there are both encouraging and discouraging aspects.

The interest in new developments and the obvious desire to change and improve packages and packaging methods is decidedly encouraging, as is the fact that reasons for change have been carefully considered in most cases.

Few companies seem to be "changing for the sake of change." Many plan to hold off changes until they find exactly the right package and packaging material. This is as it should be. Just because a new material is best for one company is no reason why it is best for another. It is certainly foolish to change from a satisfactory packaging material to an unsatisfactory one just because it is new, or because another company finds it useful.

Furthermore, there is strong evidence of intense interest on the part of top management in the whole packaging and handling function. Of the survey respondents who gave their titles (more than half did), nearly two-thirds were company officers, and their answers were among the most complete and thoughtful.

On the debit side, though, is the apparent lack of consideration on the part of respondents as to how—from the equipment point of view—they will effect the changes they plan to make in styling, type, and materials.

The tremendous improvements being made in packaging machines, and the development of new packaging methods like skin packaging (see page 71) and new packages like the "crush-proof" or "flip-top" cigarette box call for brand new packaging machines (see page 71). This certainly seems to demand substantial equipment expenditures. Yet over 60 per cent of the respondents indicate no firm plans for such expenditures in the next few years; and, of those who have budgeted equipment purchases, less than a third cite amounts that run into five figures.

Less than encouraging, too, is the
continued on page 65

Cut Carton Closing Costs in Half!

**STAPLE FILLED CARTONS
TOP AND BOTTOM
AT SAME TIME
FROM THE OUTSIDE!**

with

**International
DUAL STAPLER**



CUT MANPOWER! One man can staple all your cartons.

CUT TIME! Up to 1,000 cartons, top and bottom, per hour.

CUT SPACE! No more space-robbing set-ups—just fill staple and ship.



International Staplers

INTERNATIONAL STAPLE & MACHINE CO.

Originators of Carton Closing Staplers

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HERRIN, ILLINOIS

**INCREASE YOUR SALES
without CREDIT RISK**

*This
coupon will
bring the
facts!*

through

CONTROLLED CREDIT DISTRIBUTION®

If credit limitations are keeping your distributors from carrying adequate stocks at peak seasons, let us show you the **CONTROLLED CREDIT DISTRIBUTION** Plan now used by many leading manufacturers. It permits you to retain legal title to the merchandise, doubles the distributor's credit without additional risk to your company, acts as a collection control and supplies accurate 30-day inventory records.

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25 South William Street
New York 4, New York

NAME _____

ADDRESS _____

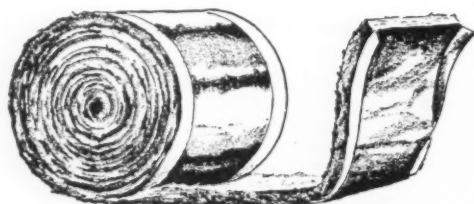
CITY _____ STATE _____

New Miracles with Glass Fibers !



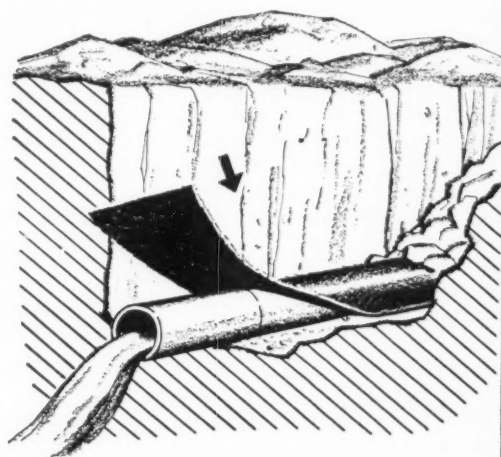
MICRO-QUARTZ TAKES THE TORCH TEST!

3/16" OF MICRO-QUARTZ TURNS BACK 2,500°F! THIS LIGHTWEIGHT (3 LBS./CU. FT.) INSULATION CAN WITHSTAND TEMPERATURES ABOVE 2,000° F. FOR PROLONGED PERIODS AND IT TAKES VIBRATION IN STRIDE.



NEW HOME INSULATION DOES MORE THAN JUST INSULATE

IT'S L-O-F GLASS FIBERS' NEW THERMO-SENSITIVE REFLECTIVE INSULATION. MADE FROM LONGER, FINER GLASS FIBERS, IT ACTUALLY HELPS HOMES COOL OFF IN 1/5 TO 1/10 THE TIME IN SUMMER... RESPOND FASTER TO THERMOSTATIC CONTROL IN WINTER.



NEW FILTER-MAT FOR FARM OR FACTORY

NEW "TILE-GUARD" POROUS MAT SLOWS SOIL BUILD-UP IN DRAINAGE TILE, SO WATER FLOWS FREELY YEARS LONGER. IN THE SAME WAY, IT HELPS FOUNDATION OR SEPTIC TANK TILING OPERATE MORE EFFICIENTLY, LAST LONGER. ALSO, IT'S AN IDEAL DUST FILTER FOR FORCED-AIR SYSTEMS.

Interested ?

These examples show how developments pioneered by L-O-F Glass Fibers Company are meeting the expanding needs of many markets. Perhaps one of the steady stream of new and improved glass and quartz fiber products from our enlarged Technical Center will fill the bill on your company's current or contemplated projects. To get the information you need, write: L-O-F Glass Fibers Company, Dept. 77-97, 1810 Madison Avenue, Toledo 1, Ohio.



L-O-F GLASS FIBERS COMPANY • TOLEDO 1, OHIO

number of companies which say "we do not package," when in fact, they spend a good deal on wrapping up their products.

For example, one manufacturer of food-dispensing equipment returned the survey unanswered saying, "Since we are manufacturers of equipment, we are not too closely involved with the problems of packaging other than its relationship to the retail selling of the product which our equipment dispenses."

Yet a follow-up letter, noting that some sort of protection seemed necessary if the company hoped to deliver its equipment unscathed, turned up this reply: "We do have a problem in protecting the finish on our equipment. Therefore, we wrap it with extreme care. First we use a waxed paper covering and then an overlay of building paper. On certain areas, we use a fiber cushion; and then we place the unit in a wooden crate."

As indicated below, a package by any other name may do just as good a job. But if the job isn't called packaging, there is a good chance that it is not receiving the attention it deserves—either from a methods and materials or a cost point of view.

There is little doubt, though, that this group of manufacturers is shrinking fast and that, as competition forces attention to both sales and costs, packaging will receive the attention it deserves from manufacturers of every type of product.


New Trends in Package Design,
page 67

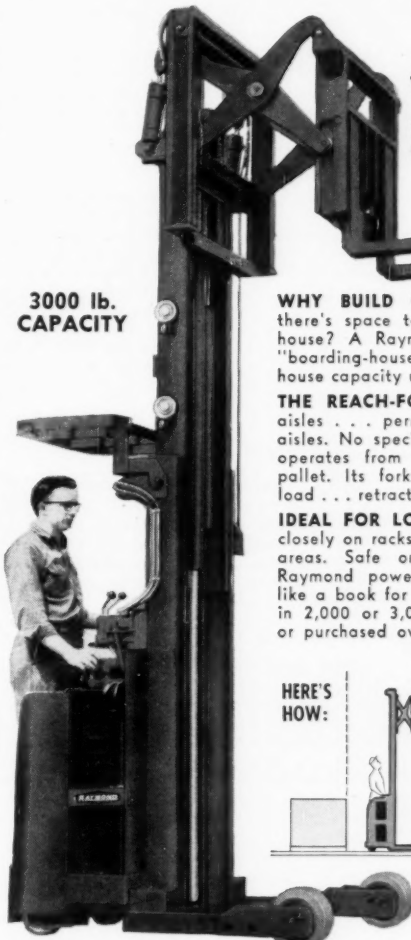


New Departure Division, General Motors Corporation

Better display, more protection, plus attractive appearance, ease of handling, dictated change from folding boxes to these molded plastic cases for ball bearings. Though the plastic costs more, company feels it's money well spent for packaging precision products.

The truck with "boarding house reach" INCREASES WAREHOUSE CAPACITY ... as much as 50%





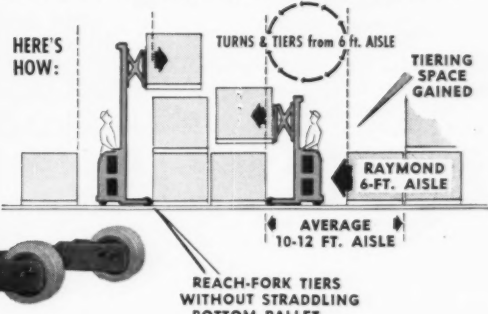
3000 lb. CAPACITY

WHY BUILD OR LEASE additional storage when there's space to be had right in your present warehouse? A Raymond Reach-Fork . . . the truck with "boarding-house reach" . . . may increase your warehouse capacity up to 50%.

THE REACH-FORK eliminates wasteful 10 to 12-ft. aisles . . . permits you to tier in space-saving 6-ft.* aisles. No special racks or pallets required because it operates from the aisle, without straddling bottom pallet. Its forks extend to pick up or deposit your load . . . retract in seconds.

IDEAL FOR LOADING and unloading. Stacks pallets closely on racks, in truck trailers, boxcars, bulk storage areas. Safe on elevators and low-capacity floors. Raymond power unit is highly accessible, opens up like a book for ease in servicing. Reach-Fork available in 2,000 or 3,000 lb. capacities . . . may be leased or purchased over 1 to 3-year periods if you wish.

HERE'S HOW:



MODEL E3RT Reach-Fork
Electric Tiering Truck. Tele-
scopic model, 3,000 lb. cap.

*For exact aisle width, ask Raymond representative to survey your operation.

THE RAYMOND CORPORATION

4631 Madison St., Greene, N.Y.

Please send Bulletin on Raymond Reach-Fork. I am interested in:

- ☐ 2,000 lb. cap. Reach-Fork.
- ☐ 3,000 lb. cap. Reach-Fork.
- ☐ Have a representative call.

**MAIL
COUPON
TODAY**

NAME _____ TITLE _____
COMPANY _____
STREET _____
CITY _____ STATE _____

How packaging manufacturers profit by an Iowa location

Now available, a detailed study of your particular organization's "economic fit" in Iowa as developed in the recent study conducted by Fantus Area Research, Inc.*

Fantus was commissioned by the State of Iowa to pinpoint those industries with particular suitability to an Iowa location. And to provide specific information for those industrial executives considering new plant locations now or in the future.

Packaging industry recommended by Fantus

The packaging industry, specifically manufacturers of *converted paper and paperboard products, foil and plastic film items and collapsible tubes* were among those industries found by Fantus to have outstanding profit potentials through an Iowa location.

Fantus recommended these industries on a detailed evaluation of such factors as: proximity to consumer and industrial markets, their present and potential value, proximity to raw materials, basic and parts supplies; quality, aptitude and supply of labor, wage rates; transportation and utilities; tax structures, community and state government attitudes.

SIGNIFICANT ADVANTAGES FOR PACKAGING PRODUCERS IN IOWA

PULP, PAPERBOARD, FOIL, CELLOPHANE AND PLASTIC MATERIALS

Consumption greater than production

Purchases by Iowa users of these items outstrip production in the state by a substantial margin. For example, production of paper and allied products in Iowa, expressed as a percent of U.S. total is 0.3. While consumption of paper and paperboard products is 1.6% of U.S. total. Consumption of these same supplies in the adjoining states of Nebraska, Minnesota and South Dakota also exceed production capacity.

\$130 million market

This same four-state market area encompasses a packaging sales territory conservatively estimated at \$130 million. By locating regional facilities in Iowa, manufacturers of containers and packaging products will pre-empt solid blocks of this \$130 million market.

Diversified consumers

The sales territory is well diversified with customers having strong growth potential. Indicative of the potential is the food industry which accounts for nearly 28% of the four-state purchases of packaging products as against a national average of 23%. And the need for additional pack-

aging products production in Iowa is not confined to one or two branches of the industry. It includes a highly varied list of items suitable for local manufacture.

Primary converters' supplies more than adequate

Capacity increases in these supplies are more than adequate to sustain new packaging operations of substantial size. Particularly significant are sources of an additional 16,000 tons of aluminum foil, a scheduled 10 million pounds of cellophane, a new output of polyethylene film; .009 corrugated board, container chipboard, pulp, starch, microcrystalline waxes and adhesives — all located in Iowa or within economical distances from the state.

COLLAPSIBLE TUBES

Iowa source of major raw material

Aluminum foil has now replaced lead as the dominant raw material of the collapsible tube industry. A tube manufacturer in Iowa gains access to a major source of foil through a large aluminum rolling mill in Eastern Iowa.

Proximity to

major central U.S. customers

The heavy Mid West concentration of plants producing medicinal and pharmaceutical products and toothpaste offer a tube manufacturer in Iowa an excellent market. Tinting colors in oil, adhesives and cements, caulking materials and food products packaged in tubes are other growing and important customers.

Improved competitive position

Since tube manufacture is concentrated to a large extent in the eastern section of the country, an Iowa location gives a producer a sharp competitive advantage with respect to midwestern users. A tube manufacturer locating a branch plant in Iowa would establish a leading position in an important area which has relatively little tube production at present.

Reduced labor costs

Female production workers in Iowa are available at an average rate of \$1.20 an hour. The comparable rate in a typical eastern city is \$1.50. An Iowa plant employing 150 females should achieve annual payroll savings of \$93,600.

General Advantages

Iowa offers many other advantages important to new packaging industries. Her transportation facilities are excellent. Iowa

labor laws are non-restrictive to industry. Iowa tax structures are advantageous. New industry is warmly welcomed in Iowa and given enthusiastic cooperation by communities and the state.

OTHER INDUSTRIES RECOMMENDED BY FANTUS FOR AN IOWA LOCATION

- Organic chemistry
- Chemical processing
- Hardware manufacture
- Screw machine products
- Mechanical instruments
- Gray iron and non-ferrous casting
- Gas-fired water heaters
- Refrigeration machinery
- Distribution transformers
- Insulated wire and cable
- Electronics products
- Plastics fabrication
- Lightweight concrete aggregates
- Athletic and sporting equipment
- Surgical and medical supplies
- Light metal fabrication and assemblies
- Leather products
- Luggage and travel goods
- Publication printing
- Dress manufacturing

If your company is one of these or related industries, you are recommended by Fantus as having particular profit possibilities in Iowa.

The Fantus facts as they pertain to your industry and a detailed analysis of your company's "economic fit" in Iowa are available to you upon request.*

*A detailed presentation of your company's potential in Iowa will be compiled from the Fantus Study upon request. Write the Iowa Development Commission on your company letterhead or call collect: Director, Iowa Development Commission, Atlantic 2-0231, Des Moines, Iowa. A representative will contact you. Your request will be handled in strict confidence.

Address your request to:



**IOWA
DEVELOPMENT
COMMISSION**

378 Jewett Bldg. • Des Moines 9, Iowa

New Trends in Package Design

Packaging is not only a big business but a fast changing one. The "crush-proof" or "flip-top" cigarette box, for instance, was introduced less than three years ago, yet already it's a standard in the industry — even though the change has meant the purchase of all-new equipment (see photograph below). And this is only one example. Packaging innovations are appearing so fast it would take an encyclopedia to list all of them.

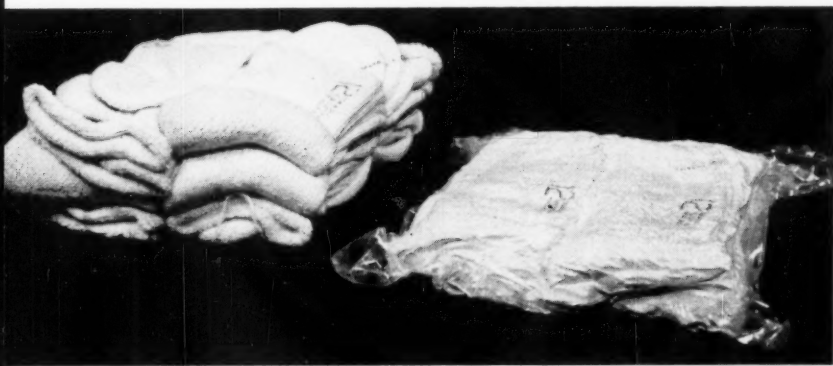
The pictures on this and the following pages are by no means to be considered a comprehensive portfolio of new packaging ideas. They were selected simply to present a

bird's eye view of what is actually a tremendous and exciting panorama.

There are new and special types of wirebound containers, collapsible rubber drums, plastic-lined cartons, and lightweight, one-trip glass bottles for chemical reagents and for consumer beverages. There are many new types of cellophane and plastic films, and all sorts of paper bags—multiwall laminates, semi-rigid types, and bags with non-skid surfaces.

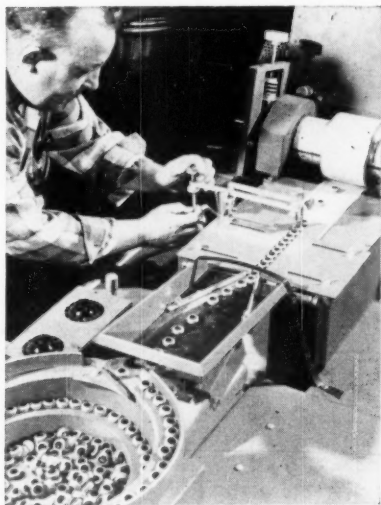
Today, the question that must be asked is not, "Can this product be packaged?" but rather, "Which of the many new ideas will be best?"

article continued on page 68



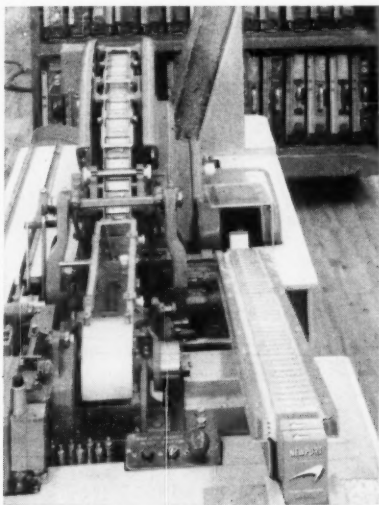
Quartermaster Food and Container Institute

De-aerated socks, and clothing and sleeping bags, too, are the latest innovation in military packaging. This vacuum-packaging technique (obviously borrowed from the food field) not only conserves space, but also provides excellent protection against moisture and moths.



Product Packaging Engineering

Automatic packaging machines are ready for both industrial and consumer products. This one is used for spare parts, is said to reduce packing costs more than 50 per cent.

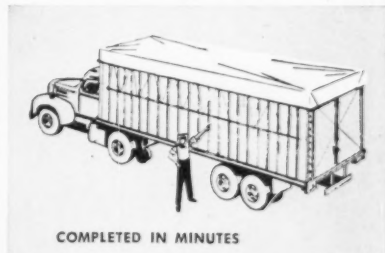


P. Lorillard

New products demand up-to-the-minute packages and packaging methods. That's why these recently introduced Newport cigarettes march to market in "crush-proof" box.

Coverlight®

**covers a world of products
the world over**

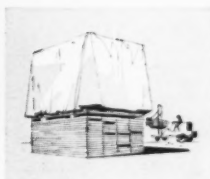


... BY ONE MAN

In freezing temperatures or steaming heat, lightweight neoprene-coated nylon Coverlight is the ideal protective covering.

It comes in a variety of weights — for all kinds of applications; is easily fabricated into any shape or form. It's waterproof and highly resistant to acids, oils, mildew and rot. Tough? ... Coverlight far outlasts conventional covering fabrics — and pays off in savings through increased efficiency and by reducing need for replacements.

Whatever the job, wherever the job — investigate the unusual advantages of Coverlight.



RESISTS WEATHER
LASTS LONGER



SO LIGHT ... 6 MEN
DO THE WORK OF 12 MEN



COMPLETE PROTECTION
WHILE ENROUTE



CUSHIONING & SHIELDING
825 LBS. MULLEN BURST

REEVES BROTHERS INC.

Vulcan Rubber Products Division

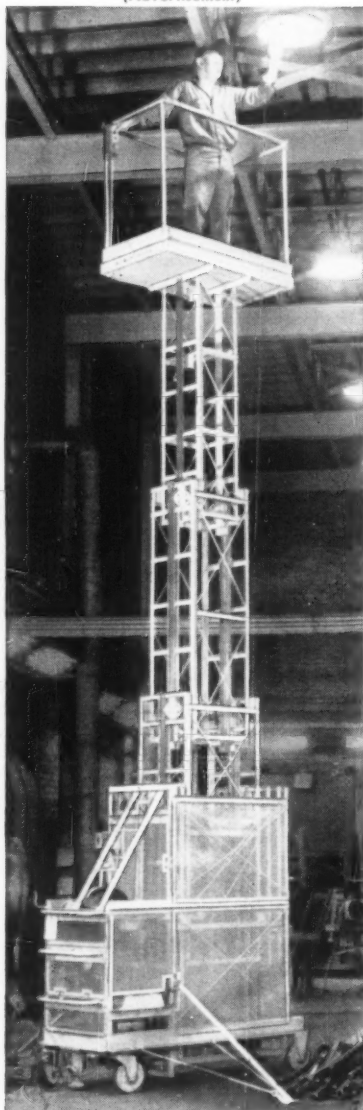
54 Worth Street • New York 13, N. Y.

Another

REEVES

**VULCAN
RUBBER PRODUCT**

(Advertisement)



**The man
who feels safe
works better
on overhead
maintenance**

Safety is our first consideration in building Hi-Reach Telescopes. Model LB (illustrated), push-button control on platform. Four heights 20 ft. to 35 ft. (all models lower to clear doorway 6'-8" by 36"). Priced from \$1510.00 up. Model PUL Hand Operated Lift — 15 ft. — \$400.00. Custom-built lifters up to 100 ft.

Write for catalogue

Economy Engineering Co., 4516
W. Lake St., Chicago 24, Ill., 342
Madison Ave., New York 17, N. Y.

**ECONOMY
ENGINEERING**

NEW TRENDS . . . continued

Dispenser-packages offer new convenience



Pillsbury Mills, Inc.

Shaker-topped flour container was designed to meet housewife's need for top-of-stove container that could be used for making gravies, flouring meats and similar jobs.

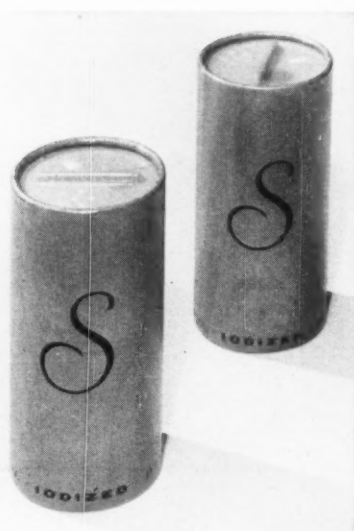
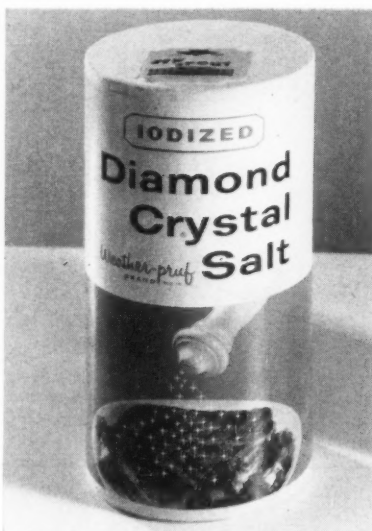
Put your product in an easy-opening, self-dispensing package if you want to win new customers and bring new satisfaction to the old.

True, these containers may cost more than standard packages, but users find them well worth the investment. Both commercial and industrial customers are willing to pay a premium for a package that will eliminate fuss, muss, and waste, and provide better product protection as well.

Salt in the shaker-topped containers below, for instance, costs about twice as much as it does in the standard package. But housewives across the country are welcoming its convenience. The shaker-topped flour package also costs more—half again as much as the regular package. But Pillsbury believes it will fill a real need.

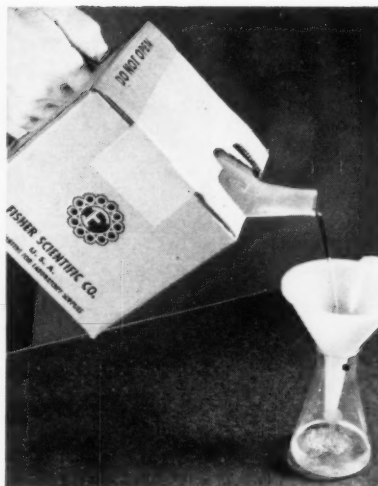
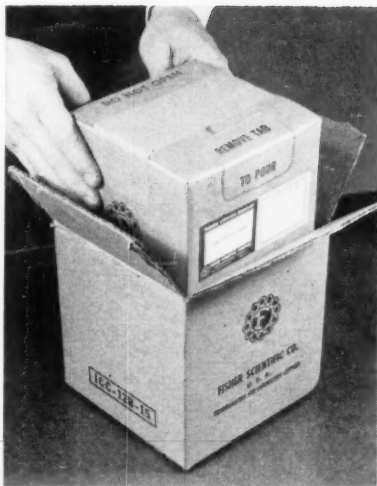
For industrial users, new dispenser packages can provide special advantages. The "cubetainer" on the opposite page is a good example, and many others could be cited.

article continued on page 71



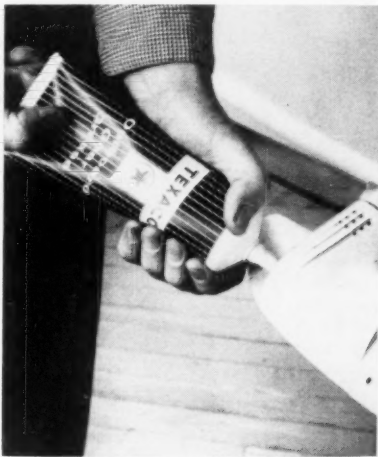
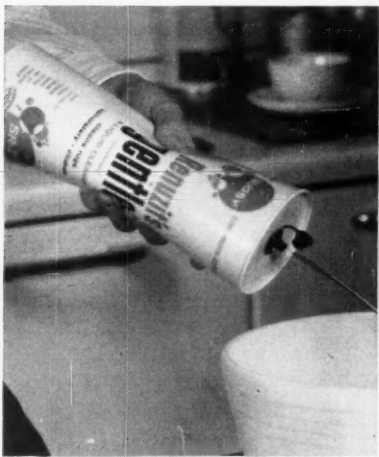
Diamond Crystal Salt Company

New salt containers for table use are offered in new combination package. Company isn't neglecting its standard packages, though, has just restyled the one pictured at the left.



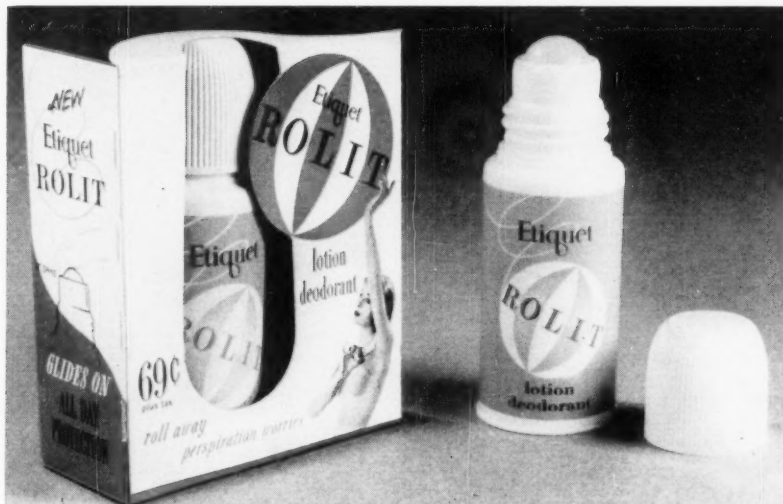
Fisher Scientific Company

Chemicals go to work in new plastic "cubetainer," encased in double corrugated box. It has built-in pouring spout, provides new safety for product and user, saves on shipping.



Bradley Container Corp.

Squeeze cans and tubes offer new convenience to both industry and the consumer. The can at the left dispenses household cleaning compound; the squeeze tube, a heavy lubricant.



Bradley Container Corp.

Roll-on dispenser applies the ballpoint principle to cosmetics. Here, plastic ball is used. Ring molded into container cap presses on ball to cut off flow when unit is not in use.

(Advertisement)



Real low cost material handling

Here a self-propelled Walkie-Worklifter is stacking pallets weighing 1000 to 1500 lbs. And working in a 5'-5" aisle, too narrow for large lift trucks. There are thirty-nine Walkie-Worklifter models priced from \$1250 to \$2500 complete with battery and charger. Lifting range up to 120". Ideal for light load elevators and floors. Write today for complete information.

Economy Engineering Company (Est. 1901),
4516 West Lake Street, Chicago 24, Illinois.



Weld-Bilt Thru-the-Floor

HYDRAULIC LIFT TABLE SIMPLIFIES PAPER CUTTING OPERATION

Actually suspended below the floor, with "table top" at floor level, this special Weld-Bilt Hydraulic Lift unit saves its cost in skid-handling ease in a production cutting operation for a leading paper manufacturer. Lifts a skidload of paper inches at a time to cutting machine level for effortless unloading.

Designed by Weld-Bilt hydraulic engineers, this unit is actuated by single hydraulic ram through convenient foot pedal or push button. Capacity, 3500 lbs., with 40" lift, it can be adapted for other products, cartons, sheet metal, packaged products, in heavier capacities as required—for machine or conveyor operation.

If you have a lifting or handling problem, you, too, will profit by calling for Weld-Bilt engineering aid. Write today.

WEST BEND EQUIPMENT CORP.
MATERIALS HANDLING ENGINEERS

303 WATER STREET, WEST BEND, WISCONSIN

NEW!

REYNOLON

TRADE MARK

water-soluble FILM

- Fully transparent
- Heat sealable
- Strong
- Gas impermeable

New Reynolon polyvinyl alcohol film is completely soluble in water...ideal for packaging solids, liquids, powders.

Investigate this intriguing new packaging material. Consider its exciting potential for packaging detergents, fertilizers, toilet cleansers, household or industrial dyes, whiting agents, bleaches — or for other applications your own ingenuity may devise. Reynolon Water Soluble Films are individually tailored to the exacting requirements of each specific application.

We will welcome the opportunity of working on applications of major interest to you.

For details, simply call the plastics engineer in the Reynolds office in New York, Camden, Detroit, Chicago, St. Louis or Los Angeles.

Or write direct today.

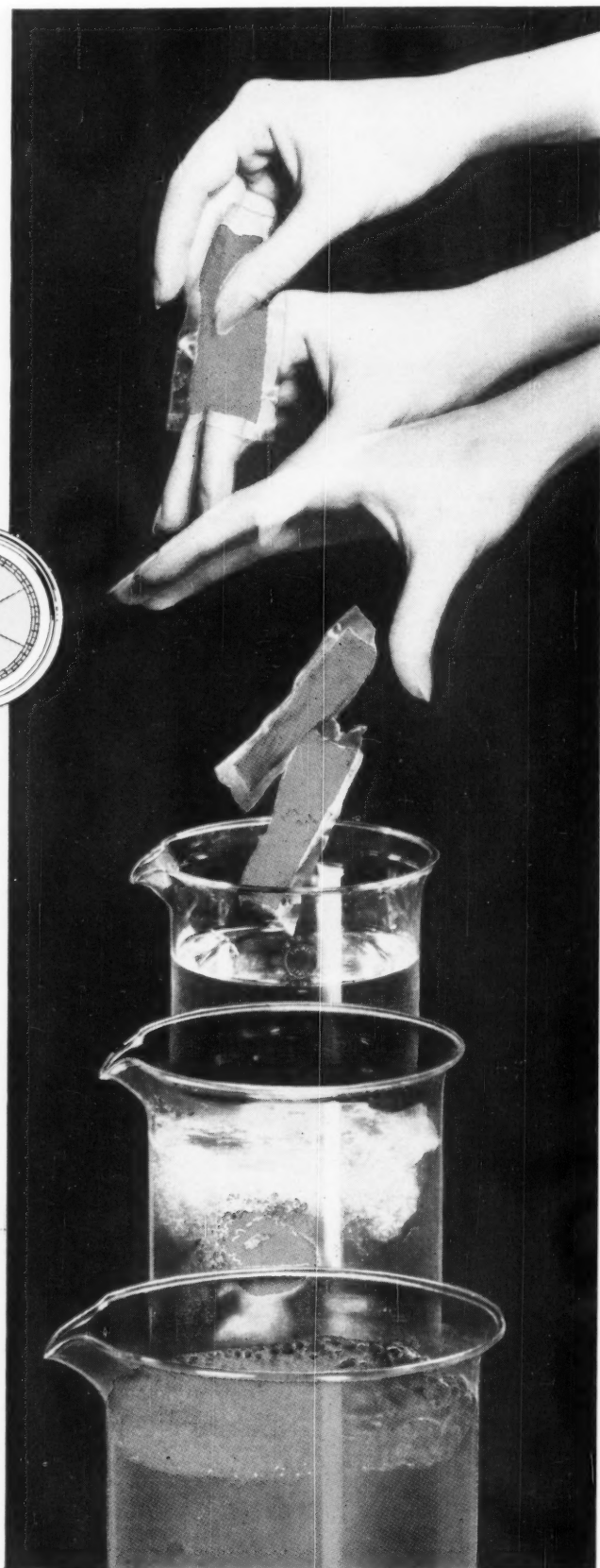
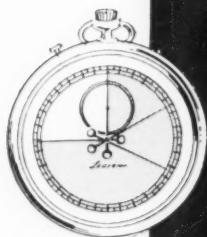


polyvinyl alcohol films for —
BAG MOLDING
METAL BONDING
SOLUBLE PACKAGING

polyvinyl chloride films for —
SKIN PACKAGING
INFLATABLES
OXYGEN TENTS
GLASS SUBSTITUTES
PROTECTIVE COVER PRODUCTS

PLASTICS DIVISION
REYNOLDS METALS COMPANY

40 Boulevard Avenue • Grottoes, Va.



Skin packaging combines display, protection

Take a back-up card, imprinted with identification data, instructions, prices. . . Place your product on it. . . Top it with a thin sheet of transparent plastic, heat so it's soft and pliable. . . Then, draw the plastic down over both—and you have a tough, durable, almost-invisible skin package.

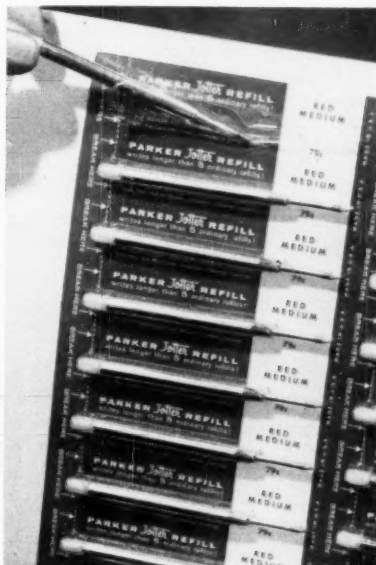
It saves space as compared to standard containers, makes it possible to keep parts together that might otherwise be lost, and simplifies inventory; while providing full visibility and handle-ability.

Even where it's more expensive than previous packaging methods, the skin pack is proving its value in increased sales; and, for some manufacturers, it's actually a cost-cutter. Parker Pen Company, for instance, estimates that the skin package saves 35 per cent as compared to the fiber tube previously used; and producers of several hardware products report substantial savings.

article continued on page 72

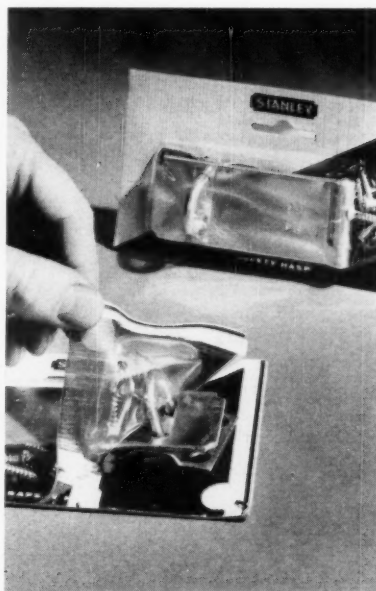


Aluminum Specialty Company
Skin package for Kiddypook aluminum toy set costs more than plastic bag previously used, but dealer and customer acceptance, reduced loss, make it worth extra cost.



Parker Pen Company

Better display, better protection, and lower cost are among the benefits recorded for this skin package, which replaces fiber tube package used for Jotter ball pen refill.



Bakelite Company
Parts stay together yet are readily examined by prospective buyers. This one is a hardware package, adapted for display on hanger-rack, holds safety-hasp and screws.

Now Heyer offers Push-button Duplicating

...at little more than the
price of some
hand-operated
machines

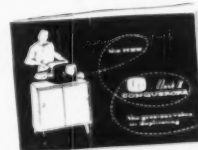


Heyer MODEL 76
Mark II
CONQUEROR
SPIRIT DUPLICATOR

\$299⁵⁰
Plus Tax

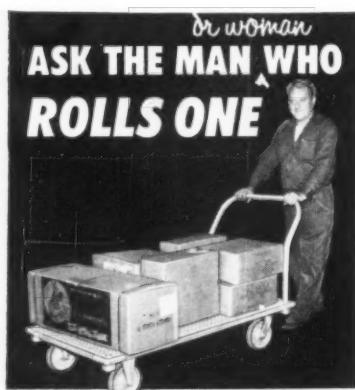
Every office duplicating job can be done much more easily on the new Model 76 Mark II Conqueror automatic electric duplicator. It delivers 110 clear, crisp copies per minute in 1 to 5 colors . . . at a fraction of a cent per copy. Its constant speed produces better and more uniform copies; it frees the operator so that the copies can be observed; and most important . . . there's no effort on the operator's part, for this new Conqueror runs without watching, and even turns off automatically. The Model 76 Mark II offers all this, plus new engineering improvements . . . at a price that can't be matched!

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Booklet
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The HEYER Corporation 9-57
1848 S. Kostner Ave., Chicago 23, Ill.
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Please send FREE 16 pg. booklet on Heyer Mark II Conqueror duplicators.

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COMPANY _____
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...if you can catch up with him!

He travels faster now with a Magliner magnesium platform truck—moving more loads in less time... doing more work at lower cost. Moving loads is easier because Magliners are magnesium light—lighter by 75%! They start easier... push easier... handle better. They're rugged and strong—engineered and built for dependable, long life service. Do you use platform trucks of any kind in your operation? Then investigate the cost savings to be had with Magliners on the job. You'll get more payload per payroll dollar!

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P. O. Box 189.

Magliner
MAGNESIUM
PLATFORM TRUCKS

**are you a
good
housekeeper?**



For good business housekeeping is largely a matter of good File-keeping.

Scatteration filing has no place here. The best practice is to use Accopress Binders and Accobind Folders to keep all your papers in order—safely filed, neatly filed, ready to find. Acco filed papers are *bound* papers—the *only* system that insures safety, saves time, space, and money.

Ask your stationer to show you the advantages of Acco-Binding—the easier, sure way to good business housekeeping.

ACCO PRODUCTS

A Division of NATSER Corporation
Ogdensburg, N. Y.

In Canada: Acco Canadian Co., Ltd., Toronto

NEW TRENDS . . continued

Big new jobs for aluminum

Today, almost every material—glass, plastics, metals, paper, wood—has a packaging application, and almost every one is making packaging news. Here, for example, are just a few of the many new packages appearing in two very different materials—one old in the packaging field, one relatively new.

In aluminum, besides the bottles,

cans, and cargo containers pictured here, there are all sorts of disposable food containers, aerosol packages, and all sorts of foil combinations, including a foil-lined fiberboard carton, designed especially for refrigerated products.

Meanwhile, the fiberboard box is getting more useful and better looking all the time. In addition to com-



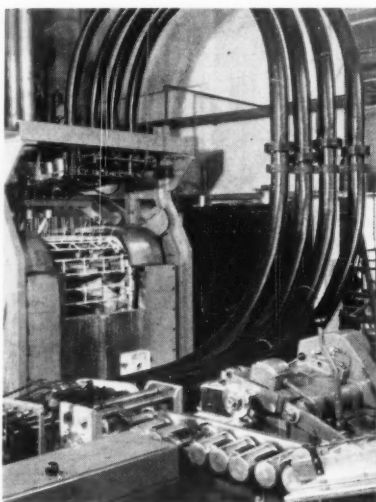
Fisher Scientific Company

Spun aluminum bottle holds capricious chemicals like hydrogen peroxide. It's seamless, resists breakage, pressure blow-out, can be shipped without special packing.



Aluminum Company of America

Aluminum cargo container for refrigerated food products is light in weight, non-contaminating, easy to handle. This one is designed to travel by truck as well as ship.



Seamless aluminum cans are turned out by impact extrusion process on unusual new automatic production line in Germany. Cans are said to be competitive with tin and black plate. Here, special pneumatic system transfers cans from trimmer to degreaser.

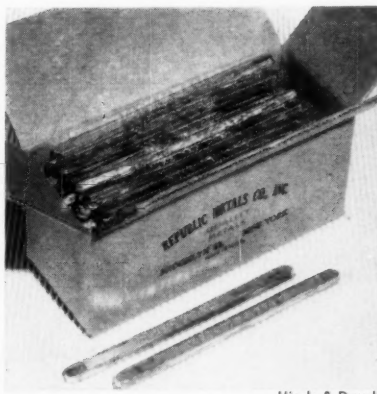


Aluminum Limited

and fiberboard

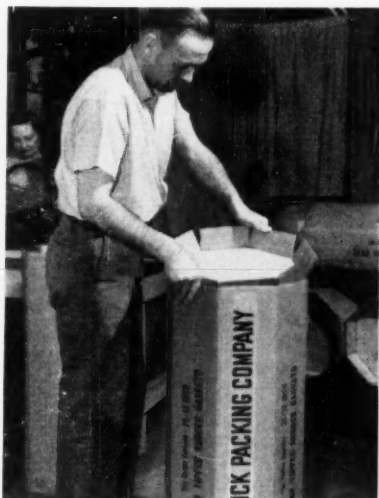
binning with aluminum, as noted above, it is being given new coatings and new liners that adapt it for carrying everything from cream to heavy chemicals. There are huge bulk containers that hold a ton or more of material, containers impregnated with corrosion inhibitors, and many new varieties of metal-edged boxes, folding cartons, and the like.

101 Ways to Improve Your Package
page 76



Hinde & Dauch

Even heavy metals like these lead bars now travel in corrugated fiberboard boxes.



Hinde & Dauch

Octagonal corrugated drum is said to save more than \$13,000 a year in packing and shipping lead-tipped rubber gaskets, is easy to set up, easy to handle and store.



Stone Container Corp.

Replacement parts for Pettibone Mulliken's equipment are now shipped in this easily assembled container that costs less, and does better job than box previously used.



Hinde & Dauch

Adhesive-coated corrugated sheet keeps Norton grinding tools from bumping together as they travel. This new packaging material is also used for electronic assemblies, serves to protect products during in-plant travel as well as on the final trip to the consumer.

SEPTEMBER 1957



CALCULATED RISK OR NO RISK AT ALL

Two identical plastic parts—or so it seems. One from supplier X, the other Lor-El. The question—whom to give the contract to?

Executives know that an experienced purchasing official won't take a chance and that the man with this type of judgement will grow and grow and grow with the firm.

Price or quality product? How do your people buy? Are you plagued with numerous rejects or are your plastic components consistently perfect?

Lor-El's scrupulous quality control is no accident. Lor-El's injection molding facilities assure delivery of a quality product at a competitive price.

Fine then—why take a chance—check Lor-El's quality—ask for references—see their facilities for yourself and eliminate risk—the risk of an inferior plastic component in your product.

Further details? — Of course — write for our illustrated brochure today. Or call: OLdfield 3-4066.

Lor-El
COMPANY,

256 PATERSON PLANK ROAD
JERSEY CITY 7, N. J.

SPECIALISTS... in Product Design,
Mold Building, Molding and Assembly

Coming Next Month

**What's Behind the Rise
in Business Failures?**

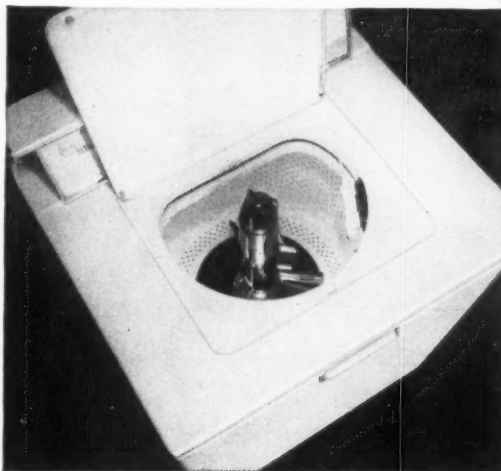
Different kinds of BAKELITE Plastics

Make it easier to



Tough, handsome, and long-lived. Flooring made of BAKELITE Brand Vinyl Resins can take years of heavy traffic without showing any appreciable wear. It resists chemicals, greases, alcohol, oil, spilled foods. Dirt doesn't penetrate the tough, smooth surface; consequently, it cleans off easily and quickly. This same quality of toughness in BAKELITE Vinyl Resins helps make more durable paints, panels for illuminated ceilings, and many other products.

The heart of this washing machine is the agitator. Made of BAKELITE Brand Phenolic molding material, it takes the abrasive action of swirling dirty water and rubbing fabrics... withstands steaming hot water, detergents and cleansers. It has to be tough, smooth-surfaced, and long-lasting. That's why BAKELITE Phenolic molding materials are used, as they are for cooking utensil handles and other products that must be easy and economical to make, yet take hard every-day service.



get rid of dirt!

Easy maintenance is a big sales point—especially when teamed up with economy, better looks or better performance—whether a product is for industry, business or the home—whether you're user or seller.



Easy selection of the right plastic for the job is an important point with manufacturers. At Bakelite Company there is a broad choice of different plastics—vinyls, phenolics, polyesters, polyethylenes, epoxies, styrenes and impact styrenes, silicones and fluorothenes. Added to this helpful variety at Bakelite Company is a great store of experience and resources that make it easier for manufacturers to put plastics to work to make better products.



Overcome sales obstacles by packaging in film made of BAKELITE Brand Polyethylene. Shirts, for example. The attractively-printed film bag not only shows the product off to its best advantage, it keeps it clean in shipping, in inventory and on display. Returns and markdowns are reduced. Sales go up. Film made of BAKELITE Polyethylene has a place in just about every packaging plan, from foods to heavy equipment, drugs to wearing apparel. Write Dept. ZH-42 for information on Polyethylene Packaging.



Reception room furniture really has to take it. Here, the attractive sofa is upholstered with a vinyl fabric laminate consisting of cloth, pigmented vinyl sheeting and a smooth, clear top layer of KRENE film. KRENE is extra-quality material, tough and flexible, resisting cleaners, foods, acids, alcohol and other agents. And it's extra easy to keep clean since dirt wipes right off the surface.

BAKELITE
BRAND
PLASTICS

Products of

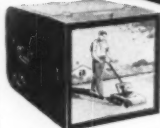
**UNION
CARBIDE**

DID YOU KNOW?

Large, costly tooling equipment for aircraft and other industries is stored safely outdoors with a sprayed-on, strippable coating based on BAKELITE Vinyl Resins.

BAKELITE COMPANY, Division of Union Carbide Corporation, 30 East 42nd Street, New York 17, N. Y.
The terms BAKELITE, UNION CARBIDE, KRENE, and the Trefoil Symbol are registered trade-marks of UCC.

TEL-A-STORY COMMANDS ATTENTION!



**DRAWS CONVENTION CROWDS . . .
PEPS UP POINT OF SALE . . .
STIMULATES SALES MEETINGS**

The Tel-A-Story Automatic Projector will sell your product using twelve 35mm or 2" x 2" square transparencies on a 156 sq. in. picture screen. Copy changes automatically every six seconds. Economical to own and use. Ideal for any type product or service.

Gives Your Product A Colorful Moving Message That Sells

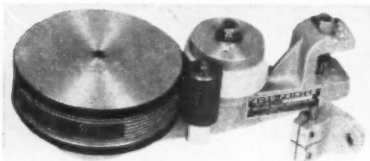
The Tel-A-Story Automatic Projector will sell your product using twelve 35mm or 2" x 2" square transparencies on a 156 sq. in. picture screen. Copy changes automatically every six seconds. Economical to own and use. Ideal for any type product or service.

Write Dept. J.
for illustrated brochure and prices

TEL-A-STORY, INC.

523 Main Street, Davenport, Iowa

THE "WHIPPET" MARKER



Automatically dates, codes, or marks production runs of cartons, packages, filled bags, boxes, rolls, cans, etc. For candy manufacturers, food packers, distillers, oil companies, etc. Send for free catalogue.

THE INDUSTRIAL MARKING EQUIPMENT COMPANY, INC.

— 454 Baltic Street, Brooklyn 17, N. Y., Dept. DR —

Glickman Corporation
INVESTMENTS

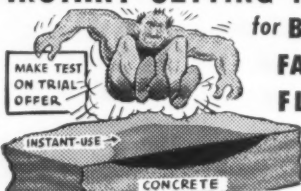
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INSTANT SETTING PATCH

for **BROKEN**

FACTORY

FLOORS



No traffic tie-ups! Just shovel INSTANT-USE into hole or rut . . . truck over — without waiting! This tough plastic material bonds tight to old concrete — right up to a feather edge. Wears like iron. Won't crack or crumble. Ideal for complete overlay! Used indoors or out. Immediate shipment. MAIL COUPON for FREE BROCHURE & TRIAL OFFER

INSTANT-USE

FLEXROCK CO. Offices in Principal Cities
3663 Filbert St., Philadelphia 1, Pa.

Please send INSTANT-USE Brochure and details of TRIAL ORDER PLAN — no obligation. (Attach coupon to company letterhead).

Name
Company
Address

CHECK ☒ LIST

101 ways to improve your package

There are many reasons for changing a package—and often many for *not* changing. But four goals stand out in the packaging survey replies, and seem to cut across all industry. These are: increasing sales appeal, reducing packaging costs, curbing product damage, and cutting handling costs. The questions below are designed to help you reach these goals. Cross out the questions that have been covered, and those you're *sure* don't apply. But place a big check mark against those which need prompt attention.

Could you increase sales appeal by:

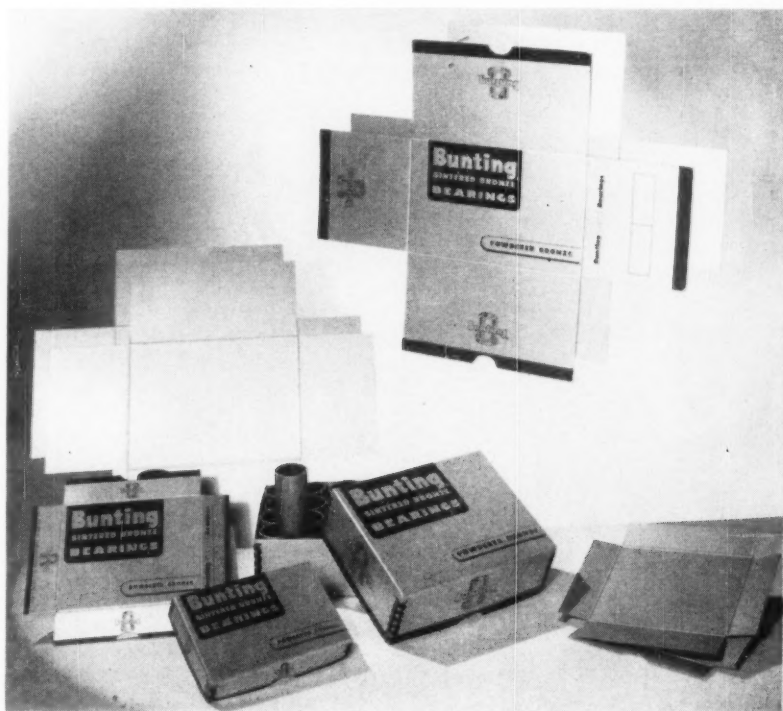
- ☐ Adopting multi-unit packages that:
 - ☐ combine two or more items of the same kind?
 - ☐ offer an assortment of colors or sizes?
 - ☐ give the user two or more items that go together but are not the same (shirt, tie, and handkerchief, for instance)?

☐ provide samples of new products along with old ones?

☐ Providing added user-convenience with such dispenser-packages as:

- ☐ aerosol containers?
- ☐ squeeze bottles and tubes?
- ☐ shaker-top cartons?
- ☐ brush-top tubes or bottles?

☐ Giving additional value in the form of a reusable package that doubles as a:



Robert Gair Company

Better looking and sturdier, these new cartons solve several packaging problems. Plastic coating on the inside prevents grease pick up; silver clay on the outside resists soiling and provides good surface for printing; metal edges add strength, improve product protection.



from
Basic Concept
to
Completed
Installation

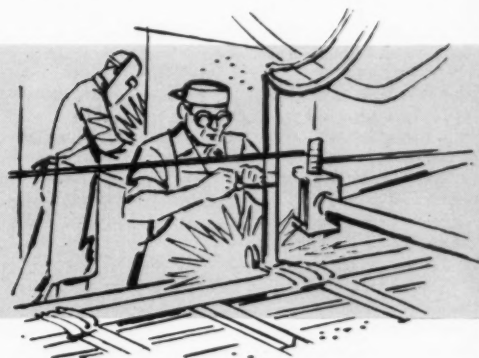


ENGINEERING

Experience — 32 years of specialized experience in designing Conveyor Systems — has made *Service* Engineering a recognized **first**, second to none!

MANUFACTURING

Each *Service* Conveyor is built in our own plant by experienced factory mechanics under the close supervision of our Engineering Department.



INSTALLATION

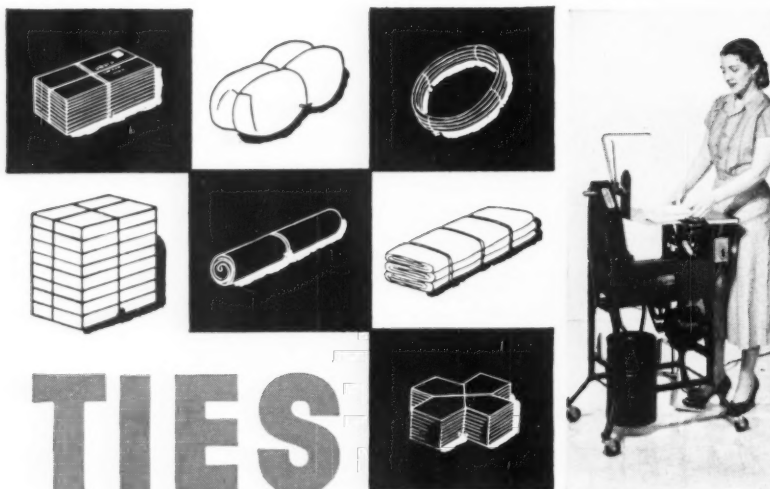
A factory-trained crew installs and test-runs each *Service* Conveyor System. They work as a team to hold **down-time** and production delays to a minimum.

Service CONVEYOR COMPANY INC.

7766 BRYDEN AVENUE . . . DETROIT 10, MICHIGAN



Serving the Automotive, Foundry, Rubber and Metal Working Industries



TIES ANYTHING

Anything you now tie by hand ... you can tie up to 10 times faster on a BUNN Tying Machine!

Bunn Tying Machines are fast ... up to ten times faster than old-fashioned hand tying. That's why thousands of companies in all kinds of businesses are boosting production and cutting costs with Bunn twine-tying equipment. Consider these advantages:

Machine has many uses: The efficiency and economy of Bunn Machines is not limited to tying mail. Hundreds of different items ... from cans to laundry bundles, from bakery goods to newspapers, from meats to corrugated cardboard and cartons ... are tied quickly and securely on Bunn Package Tying Machines.

Automatic adjustment eliminates manual changeovers. Any size or shape is tied in the same fast time ... 1½ seconds or less.

Controlled tension reduces package breakage and product damage. The strong twine can't cut the product ... can't slip off.

Slip-proof knot can't come undone even with rough handling. Approved by postmasters for mail tying of all kinds.

Simple operation is fatigue-less and completely safe. Inexperienced operators become experts in just a few minutes.

Let a Bunn representative prove to you that ... *almost anything which can be tied by hand can be tied faster, better and more economically with a Bunn Package Tying Machine.*

BUNN

PACKAGE
TYING
MACHINES
Since 1907

B. H. BUNN CO., 7605 Vincennes Ave., Dept. DR-97, Chicago 20, Ill.
Export Department: 10406 South Western Ave., Chicago 43, Ill.

MAIL COUPON NOW FOR MORE FACTS



GET THE WHOLE STORY

Send today for this fact-packed booklet, which illustrates the many advantages of Bunn Tying Machines. Or let a Bunn Tying Engineer show you. No obligation.

7631

B. H. BUNN CO., Dept. DR-97
7605 Vincennes Ave., Chicago 20, Ill.

- ☐ Please send me a copy of your free booklet.
☐ Please have a Bunn Tying Engineer contact me.

Name _____

Company _____

Address _____

City _____ Zone _____ State _____



North American Aviation

New spring steel clamps make it easy to put boxes together and take them apart. Clamps are said to be far stronger than nails, and do not damage box panels; so box can be knocked down for return shipment, and then panels can be reused.

- ☐ tool kit? tote box? feed hopper?
- ☐ beach bag? bait kit? sewing kit? food container?
- ☐ Increasing product display by changing to:
 - ☐ window bags, envelopes, or boxes?
 - ☐ transparent pouches, tubes, or molded containers?
 - ☐ skin packages or vacuum-formed blister packs?

Could you cut packaging costs and reduce product damage by:

- ☐ Redesigning the product itself to:
 - ☐ eliminate protruding legs and levers that require a larger package than would otherwise be needed; or make them disassemblable?
 - ☐ increase the sturdiness of the product so less cushioning will be needed?
 - ☐ increase the corrosion resistance of the product to eliminate the need for special protective packaging?
 - ☐ provide a more durable finish that does not require special padding?

- ☐ reduce the number of sizes and types so fewer packages will be needed?
- ☐ Simplifying packaging requirements with:
 - ☐ laminated materials that can replace separate liners?
 - ☐ pre-formed liners and wrappers that will adapt one size of container for several products?
 - ☐ pre-formed boxes and bags that can substitute for manual wraps?
 - ☐ strapping and banding products instead of wrapping them?
 - ☐ stretchable corrugated wrappings that will conform to the shape of the product?
 - ☐ wraps that have built-in corrosion inhibitors so greases or moisture absorbents need not be added separately?
 - ☐ cushioning and reinforcement spotted in just the areas where it's needed instead of covering the entire product?
 - ☐ containers that will serve as both shipping and display units, thus making it possible to eliminate at least one packing operation?

Could you cut handling and shipping costs by:

- ☐ Reducing the size and weight of the package by:



Wirebound Box Manufacturers Association

Protected against impact and vibration, aluminum foil rolls are suspended on their cores in specially designed wire-bound container that weighs only 75 pounds as compared to a tare weight of 175 for box previously used. Packing time is just ten minutes.

SEPTEMBER 1957

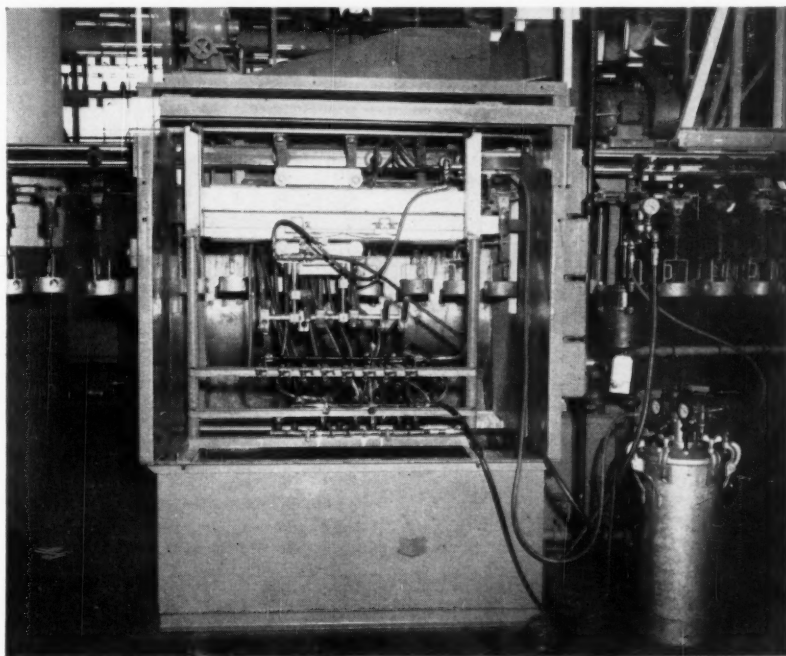
SMALL PARTS PAINTED

Automatically

in Continuous Operation

by

PETERS-DALTON



Automatic P-D Hydro-Whirl Flood Sheet Type Paint Spray Booth

An important phase of a complete finishing system installed by Peters-Dalton includes the Paint Spray Booth shown above. Here, small parts are conveyed, following phosphatizing and drying cycles, through this Hydro-Whirl Flood Sheet Spray Booth . . . the painting operations are performed automatically. The installation is space saving, extremely efficient and effects major economies in time and labor.

Regardless of your needs, the more than quarter century of experiences gained by Peters-Dalton, through designing, engineering, manufacturing and installing all types and sizes of finishing equipment, are available to you. Why not send your specifications or prints? They will receive our prompt attention. Just write, wire or phone . . . we'll be glad to tell you more.

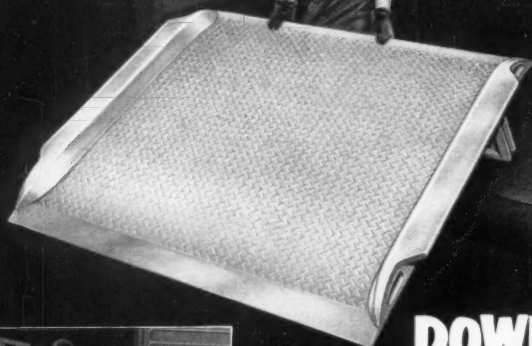
Representatives in Principal Cities



Hydro-Whirl Paint Spray Booths
Industrial Washing Equipment

Drying and Baking Ovens
Hydro-Whirl Dust Collecting Systems

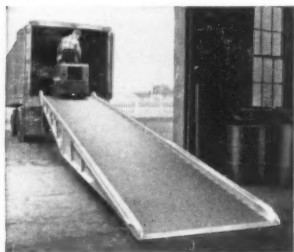
Down goes a Magliner



DOWN GO LOADING COSTS!



NARROW CONGESTED DOCK? This narrow rail dock required a flared Magliner dock board, allowing power trucks to make sharp, right angle turns.



GROUND LEVEL LOADING? Check into a Magliner mobile loading ramp—a loading dock on wheels... where you want it... when you want it. One man moves it.



PLANNING A NEW PLANT? Install Magliner Perma-Docks—the permanent magnesium dock board system. Low initial cost... economical installation... maintenance-free operation. Built-in dock loading efficiency—plus more usable dock space.

And they'll stay down with Magliner magnesium dock boards on the job! Magliners speed loading, eliminate dock congestion... get extra work from power trucks and other loading equipment. Costs go down and stay down because Magliners are magnesium light—easy to put down... easy to move. No heavy lifting... no injury hazards. Men, loads and equipment move *fast, sure, safe*—protected against accidents and costly damage.

Magliners are magnesium-strong too, for rugged dependable service... safely handle loads up to 20,000 lbs. and more. Magliners are low in initial cost, provide long-life service, require less maintenance. Economy and cost savings right down the line!

Put all these advantages to work for you... put Magliners to work on your dock!

MagLiner
MAGNESIUM
DOCK BOARDS

Canadian Factory: Magline of Canada Ltd., Renfrew, Ontario

Please send me my copy of
How to Cut Dock Loading Costs.

Check here for information on:

- ☐ Movable Dock Boards
- ☐ Permanent-Type Dock Boards
- ☐ Mobile Loading Ramp
- ☐ Delivery Truck Ramp

Name _____
Company _____
Address _____
City _____ Zone _____ State _____

MAGLINE INC. • BOX 39 • PINCONNING, MICHIGAN

- ☐ reducing the size of the product itself?
- ☐ eliminating wraps and liners that are not really necessary?
- ☐ using thinner sections or lighter-weight materials?
- ☐ providing grips, lugs, and fork entries on the package to make it easy to handle with standard handling equipment?
- ☐ using larger packages or bulk shipments to reduce the number of items that must be handled?
- ☐ designing packages for shipment in strapped unit loads?
- ☐ designing packages that will stack neatly and safely?

And have you checked these points:

- ☐ Would a one-trip container save enough on return shipments, repair, accounting, and storage costs to justify its use instead of a returnable package?
- ☐ Would a new type of returnable package—perhaps a collapsible one—save over the one-trip package you are now using?
- ☐ Are your containers adaptable to mechanical packing?
- ☐ Are they easy to seal?
- ☐ Are you using the least expensive sealing method?
- ☐ Do you know your labor cost of packing *per package*?



Gaylor Container Corp.

Handling and packaging costs are reduced by this unusual container. Push-out sections lead into pre-placed corrugated tubes that fit the fork truck's blades. The product, creosoted wood blocks, packed both above and below tubes, helps to hold them in place.



Radio Corporation of America

Better protection for delicate magnetrons is provided by this lightweight molded polystyrene package that holds tube firmly, yet provides clearance where it's needed. The box has built-in hand grips and provides compartment for technical data sheets.

☐ Have you time-studied packing operations and tested different types of packages for lowest unit packing cost?

☐ If the contents of the package must be inspected (for evidence of corrosion, compliance with postal regulations, etc.), has provision been made for this in the form of "windows," access "doors," or easy-opening features?

☐ If the package is in any way unusual, are instructions for handling, storing, and opening clearly printed on its face?

☐ Is the type big enough to read from a distance? (Industrial as well as consumer packages often end up on shelves far above eye level.)

☐ Have you studied the packages used for competing products and for similar products in other fields to see if they have ideas you might adopt? (Several plastic film packages, for instance, are proving just as useful for hardware and industrial fasteners as for candy and cocktail snacks.)

☐ Are you taking full advantage of the excellent packaging literature, design services, and testing facilities

How to get your shipments out faster, at less cost

New 16-page booklet shows how easily it can be done through more systematic addressing of cartons, labels and tags

Slow, old-fashioned methods of stenciling and labeling can seriously delay your shipments. While a shipment sits on the dock ready to go, an office girl is writing out labels by hand. While a stack of cartons waits to be stenciled, a shipping clerk spends precious minutes looking through the files for the right stencilboard. And, because the pressure is on the shipping department to get orders out quickly, cartons are improperly marked and then lost enroute.

A vital operation

The stenciling and labeling of shipments is one of the most important operations in the plant because nothing gets shipped until it's been addressed. You can have the most carefully laid plans for getting your product from the production line to your customer, but if it isn't labeled, tagged or stenciled it never gets out of the plant.

Efficiency-wise companies are rapidly discovering that the key to a really efficient shipping operation is a system for addressing. This system should be fast, inexpensive, require a minimum of labor, and be tailored to your particular order-processing and material handling procedure.



How to streamline your shipment addressing for speed and economy

Featuring: 7 system ideas

Now being used by leading companies in every industry for addressing labels, tags and cartons

Developed by: Weber Marking Systems, Dept. 3-I, Mount Prospect, Ill.

Available now . . .

Send for your free copy

CONTAINS USEFUL INFORMATION

- How to determine the efficiency of your present shipment addressing operation
- The key to a modern, efficient shipping department
- The latest direct-to-carton stenciling systems
- Printing and addressing your shipping labels in one operation
- How to prepare your shipping stencils with your order-invoice or bill-of-lading forms

Comprehensive booklet

In the 16-page booklet offered here you will find such a system. Thousands of companies who have already adopted them have cut their shipment addressing time by as much as 50% to 70%. Send for your free booklet. There is no obligation.

Weber Marking Systems
Div. of Weber
Addressing Machine
Co., Inc.,
Mount Prospect, Illinois
Sales and service in all
principal cities

Weber

WEBER MARKING SYSTEMS
Dept. 3-I
Mount Prospect, Ill.

COMPANY _____

INDIVIDUAL _____

POSITION _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

How Much Is

hidden damage

**Costing You
In Cash, Time, Trouble
And Good Will?**

You can't afford to play hide and seek with damage! Just imagine the total time loss resulting from delivery of a damaged product . . . the additional complications and costs and, most of all, the loss of your customer's good will. These are all very real factors in your total packing, handling and shipping costs . . . factors that can't be ignored on the balance sheet.

You can eliminate embarrassment and expense by packing your product in a tough, protective "see through" Wirebound Crate that allows fast, easy inspection at any time. Investigate Wirebounds for lower cost, safe packing, handling and shipping. Write for the informative booklet "What to Expect From Wirebounds," or ask for a sales engineer to call.

Product visibility
eliminates Hidden Damage.

Write for the Book
or the Man



**Wirebound
BOXES & CRATES**

**WIREBOUND BOX
MANUFACTURERS ASSOCIATION**
Room 1151, 327 So. LaSalle St., Chicago 4, Ill.

offered by suppliers of packages and packaging materials?

☐ Do you receive such Government publications on packaging as the leaflets published by the Business Services and Defense Administration, the Small Business Administration, and the Department of Agriculture?

☐ Are you taking advantage of the recommendations of the Association of American Railroads and such industry groups as the National Safe Transit Committee? (The latter, sponsored by the Porcelain Enamel Institute, is open to membership from all industries.)

☐ Do you get copies of the proceeding of such organizations as the Package Designers' Institute, the American Management Association Packaging Division, and the Packaging Institute?

☐ Do you have a manual of packaging specifications for each of your products—or a card index of packages—and does it include a notation of alternate materials and containers that may be used in cases of supply breakdown?

☐ Have you given one person full responsibility for packaging and package design, and is his work fully coordinated with product design, production, materials handling, and sales?

*Packaging in the Atomic Age
next page*



Bakelite Company

Chairs and sofas, like celery and spinach, are now packed in polyethylene bags—and for the same reasons: convenience of packaging, display, and protection. This is a good example of how a new packaging development can spread to many industries.

Packaging in the atomic age

Use of high-energy radiation to preserve foods, sterilize drugs, and change the properties of materials is a coming industrial technique (see August, page 47), and, in its commercialization, packaging will play a major role.

As E. Alfred Burrill of High Voltage Engineering Corp. points out, the container or wrapper for materials receiving radiation treatment must not only perform all of the regular packaging functions, but must also be resistant to radiation damage and must be made of a material that will absorb as little radiation as possible, allowing as much radiation as possible to get through to the product or material being treated.

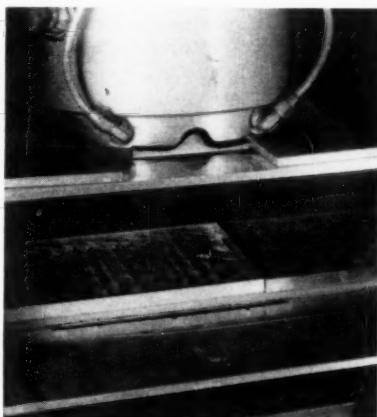
Fortunately, a good many of today's most popular packaging materials, among them plastic film and aluminum foil, meet these requirements surprisingly well. But there will be need for many more materials, and for much more knowledge of how radiation affects them, as this type of treatment expands into new commercial fields.

The shape and size of the package also play a key role in determining whether or not radiation treatments can be used and which type of radiation is best for the job. Thin, flat packages can be treated by any one

of the several types of radiation-generating machines now available. But thick packages and cans of the type commonly seen on grocery shelves require the penetrating gamma rays produced only by high-energy machines and radioisotopes.

So far, commercial applications of radiation processing are relatively few; but, as the pictures here show, they do exist. There should be many more in the years ahead, and their impact on packaging will be great.

END



The Upjohn Company

Antibiotic capsules, sealed in plastic film, pass under head of Van de Graaff electron beam generator. This product could not properly be sterilized in any other way.



High Voltage Engineering

Medical tubing is packed in lightweight, transparent, radiation-resistant polyethylene for electron beam sterilization. Clay-Adams, Inc., tubing supplier, reports the new sterilization technique is far superior to autoclave and germicidal treatments previously used.

SEPTEMBER 1957



If you regularly address 5 or more cartons per shipment

... you can save money and avoid costly errors by addressing multiple shipments as a by-product of office procedure.



Addressing with IBM machine or typewriter

You can prepare STEN-C-LABELS at the same time as your invoice, order or bill of lading, whatever your procedure or equipment—manual or electric typewriters, electric billing or accounting machines, Card-o-type, Teletype or Flexewriter.



Imprinting direct to carton and gummed labels

Shipping department makes unlimited impressions with STEN-C-LABEL Applicator direct to PANEL-LABEL on carton or to printed gummed labels or tags. All addressing errors, mis-shipments and repetitive writing are eliminated.

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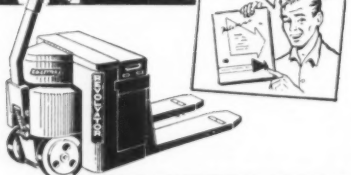
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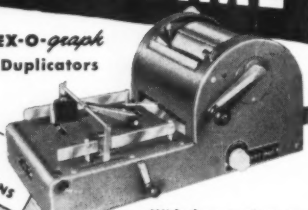
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POINT OF SALE AND THE PRODUCT

EVERYTHING SUCCEEDS OR FAILS at the point of sale. All the time, talent, and money invested in planning, research, raw materials, processing, and distributing reaches the payoff point when the goods are offered to the consumer. That is why the appearance of the product at the point of sale is of tremendous importance. Packaging is a strong element in the emotional appeal that is involved in merchandising any product, regardless of end use. Packaging for handling and transport and packaging for convenience and display are separate requirements, but are not easily divorced. We are primarily concerned here with the visual influence of the package.

Merchandising problems deal with intangibles—among the most important being the whims of the public. Merchandising, like medicine, is an inexact science: both involve people, and in both diagnosis depends on unstable factors. Styles, whims, and attitudes reflect the impulses of the public, and some of the actions, decisions, and trends are not completely predictable. Desire, not logic, is the basis of many buying decisions. Advertising and sales promotion create desire through the emotions, not through the intellect. People buy what they want, not always what they need. The visual display influences them. That's why an unpainted Tobacco Road shack may sport a television antenna or even a new two-tone convertible. The productivity of our mills and factories rests on the merchandising ability of men and women who convince people that luxuries are a necessity, and convince enough of them so that it becomes an economic and social fact.

Good packaging appeals to the senses. The immediate lure of any product, old or new, depends on its appeal to the eye, and often to the senses of hearing, smell, taste, and touch as well. The long-term acceptance and use of any staple product must depend on inherent quality and service values, but even the old staple can revive sales with a new dress, slogan, or sales approach.

The art of effective merchandising includes many elements, but the visual display of the product and the combined utility and beauty of the container are a powerful sales-builder. The attractive package challenges the eye and creates desire. There may be some rational hedging in the mind of the interested purchaser, but reason usually puts up a losing fight when the emotions command action.

Modern packaging has achieved wonders for manufacturer, merchant, and consumer. Food packaging has taken a long, healthy step since the days of the country store with its open bins and barrels. Hardware for the consumer is neatly and attractively packaged for counter displays. Bags, boxes, and cartons are engineered in functional designs, and well dressed to boot. Everything succeeds or fails at the point of sale—and the merchandising specialists using modern packaging are putting up a strong fight for the buyer's attention and action at the time and place where profits are made or lost.

—A.M.S.

WHAT MAKES EXECUTIVES RUN? continued from page 38

tive principle, even though the organization of functions theoretically provides for competition. For example, a sales vice president may have three sales managers reporting to him. This would seem to provide competition for his job. Yet the vice president may have effectively stifled competition by having one of these sales managers, whom he likes personally, "take charge" in his absence. (A better plan, of course, would be to rotate the "take charge" responsibility among the three men.)

One of the common excuses for the "crown prince" philosophy has to do with "training" a man for the top job. However, it is of more than passing interest that successful practitioners of the competitive principle give no inkling to the heir apparent until the job is filled. It is generally believed in Detroit that Harlow Curtice was taken completely by surprise when he was notified he had been elected president of General Motors. He was only one of several competing for the position, and his selection probably was dictated by the competitive environment in the industry at the time it was made.

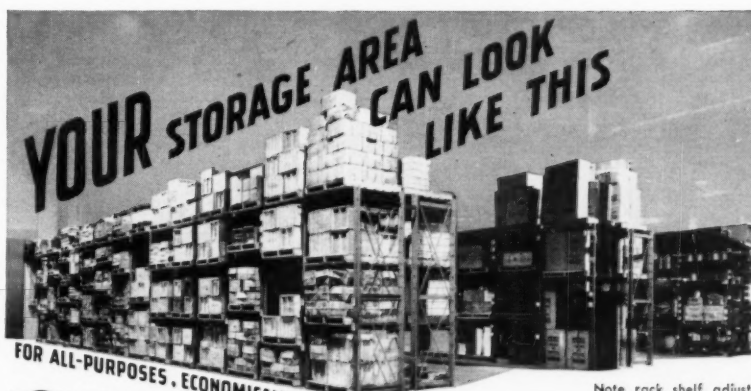
Competition Without Politics

Top management's failure to adopt the principles of internal competition frequently stems from a belief that it fosters intra-company politics. One president expresses this point of view as follows: "I want our people to be bending every effort to lick our competitors, rather than conjuring up ways to look better than the other executives on the team."

This viewpoint does have validity when individual job responsibilities and authorities are unclear, or the business is committee-managed. But power-grabbing is unprofitable, and hence unlikely, when job responsibilities are clear-cut and individual actions are reviewed in terms of individual responsibilities.

The creation of an environment that develops the competitive instincts of the executive group is rarely accomplished by accident. It takes leadership and administrative skill of a high order. This is particularly true in industries where a long growth trend has lessened the need for a strongly competitive management.

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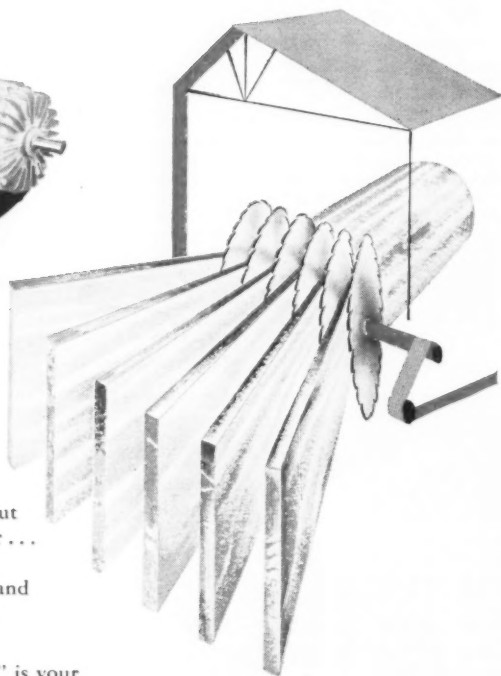
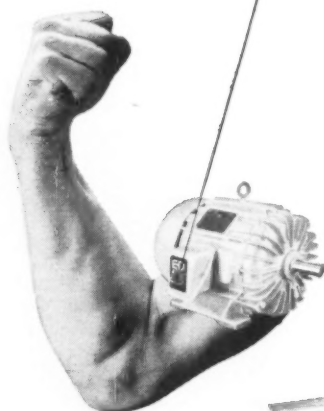


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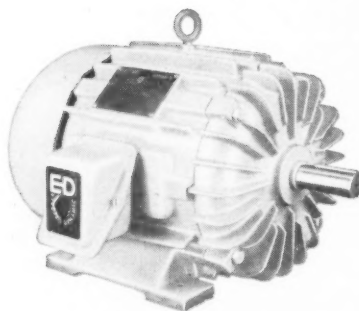
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have become "soft" as a result of such a period of relaxation eventually get their comeuppance. The slow death of the street-car companies in their struggle with buses is a case in point.

The competitive instinct can be sharpened by a judicious honing with such management tools as incentive compensation. Other means—promotion, merit increases, and the like—are used to the same ends by shrewd administrators.

The Money Motivation

Surveys indicate that money is not the most potent incentive. But certainly the satisfactions that can be bought with money are important. A man may want a bigger house, a new car, a mink coat for his wife, education for his children. If he wants these things enough, if he understands what he must do to earn the money to buy them, and if he has the necessary talents, these ambitions become effective motivations.

And money—or compensation—is the only motivation that can be measured. All the other motivations are qualitative. This fact has encouraged over-reliance on compensation as a motivation, for it appears to be simpler to administer than the non-financial motivations. In actuality, however, well-administered compensation programs are probably the exception rather than the rule.

Too often, management regards compensation in the light of a cost rather than a motivation. This puts the matter in the wrong perspective. The impact on profits of highly motivated, higher-paid, better-than-average executives is far greater than that of the compensation "premium" they are paid.

It is easy, of course, to establish lush compensation programs that, in effect, give money away. To get a high return, in terms of motivation, for the money allocated to compensation takes thoughtful and skilful administration.

It goes without saying that most companies fall short of maximum use of these basic motivational elements. Many top executives, indeed, do not even appear to recognize how this combination of motivations bears on their company's success. The new president of a large concern, who had been recruited from the leading company in the field, commented on the difference between the execu-

tives of the two companies. "Man for man, the executives I find here are as good as those working for my former employer. But they don't have the unity of purpose, the momentum, or the confidence that comes from years of leading the parade."

In effect, he was saying they had not had leadership. And without leadership they had lacked several of the other key motivational elements.

The average company's greatest problem in maximizing the motivation of the executive group results from top management's inability to bring all these motivations *consistently* into play. For example, a company may have an executive incentive plan, yet be committee-managed to the point where it is impossible to judge who is responsible for what—and, therefore, who should be rewarded or penalized. Or a company may seek to build a competitive internal environment, yet be unwilling to apply the discipline necessary to do so by breaking with a tradition of seniority promotion. In each instance, one motivation tends to cancel out the other.

Generally, this results from a lack of appreciation of the interrelationship among the various motivations. Many company presidents who devote a great deal of time and effort to insuring that their executives are well paid have seriously frustrated these same executives by refusing to delegate authority to them. Others place great emphasis on personal leadership and overlook the need for sound administration of salaries or the maintenance of discipline.

The Importance of Administration

The point is that no one motivation will generate all the forward drive needed by industry today. It takes a judicious application of each of the major motivations to do the job. And they must be administered in conformity with the unique needs and characteristics of the individual company. Different motivational "mixes" may be required in different companies; a bank, for instance, has a different motivational environment from a department store.

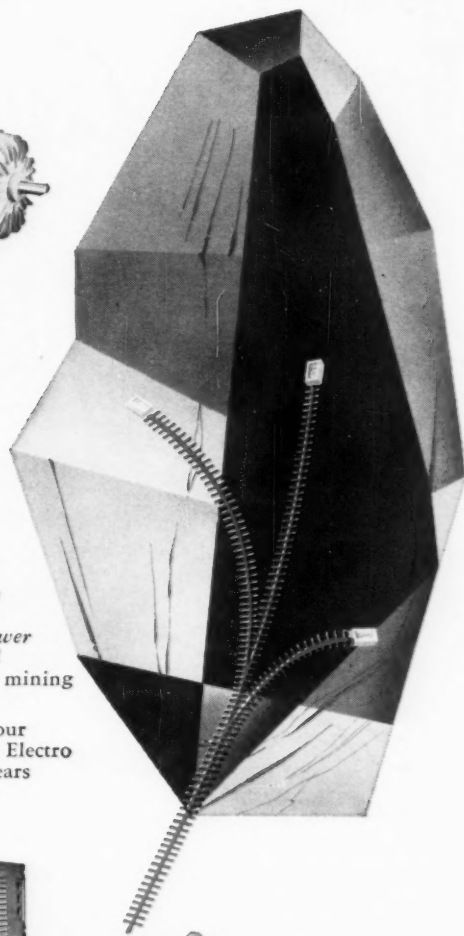
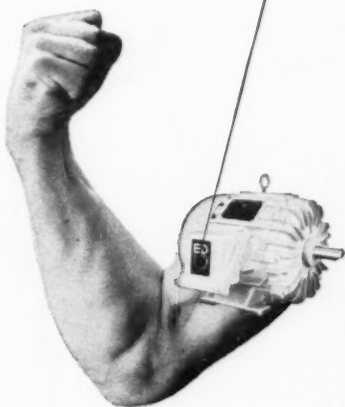
In recent years, the need for sound administration of the several motivational elements has increased materially as a result of a little-recognized but major change in the proportion of supervisory and staff employees.

For example, one of the country's



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largest manufacturers reports increases in employment since 1948 as follows:

Hourly employees+ 60%
Salaried employees+130%

Even more significant are the changes that occurred between 1952 and 1956:

Hourly employees+ 16%
Salaried employees+ 70%

In a four-year period, therefore, the number of engineering, accounting, and other staff employees—largely supervisory—increased more than hourly employees did in a decade.

If this is typical of industry generally, the mounting need for more effective motivation is becoming acute—and the importance (and rewards) of better administration are also compounding at a rate faster than the over-all company growth rate would indicate.

More for the Money

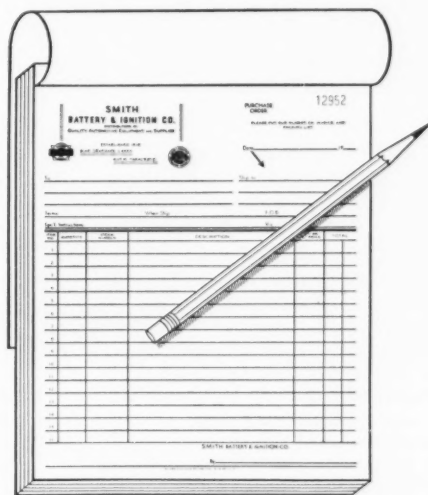
Much can certainly be done to improve the administration of the financial incentives provided for executives. Relatively few companies have recognized how widely the motivational values of the various compensation devices—salary, bonus, deferred compensation, and so on—vary between executive echelons.

For example, many companies have given stock options to executives whose income level is too low for capital gains to offer a real tax advantage. In such cases, cash probably would have been more effective as a motivation, for it would have been more suitable to their individual needs. Even in companies where compensation is well administered, financial motivation alone is growing less and less important to highly paid executives.

To develop the nonfinancial motivations most effectively, a great deal more should be known about what motivates the executive group than is known today. However, even the relatively limited number of nonfinancial motivations discussed in this article points to the likelihood that inadequate administration will be a more serious stumbling block to this development than the lack of *new* knowledge. In effect, we already know more about executive motivation than we appear to be using to advantage.

How can management administer the nonfinancial motivational ele-

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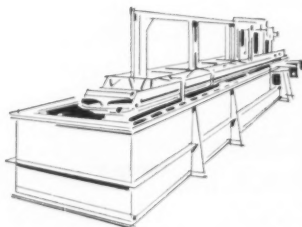
Before the aperture mask is placed in the tube, this vitally important part is iron plated then blackened to give satisfactory tube operation. This electroplated coating minimizes warpage under electron bombardment.

Two full automatic plating machines were designed by Udylite for iron plating and blackening of these aperture masks at the Lancaster plant of the Radio Corporation of America. Specifications for the plating and blackening operations are extremely rigid and the plating operation calls for a precision almost beyond measures.

Now these two Udylite Full Automatic Plating Machines are helping to speed up production at RCA to meet the increasing demand for color TV receiving sets. In fact, production has been tripled since the Udylite machines were installed. And the super-critical tolerances are being met in plating operations.

This is another job well done by Udylite—leaders in machines, processes, electrical equipment and supplies for plating and electro-chemical finishes.

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ments—such as job challenge, status, discipline, and competition—that are really part of the organizational climate? In one sense, these motivations cannot be "administered" at all, because they are intangibles. But the climate of a company can be developed, for it can be changed. The change may be a planned one, or it may simply be a result of the personality of a dominant executive. This indicates that the nonfinancial motivations *can* be "administered," in the sense that they can be managed, controlled, and directed.

The chief executive must necessarily play a major role in "administering" the nonfinancial motivations. Either actively or passively he sets the "tone" of the company's internal climate and determines whether the goals set for executives are demanding or relaxed.

The chief executive thus decides to what extent the various motivations will be brought to bear in the company. But once this pattern has been determined, the follow-through has administrative aspects that may be delegated.

Establishing Responsibility

The executive to whom the administrative aspects of executive motivation might reasonably be delegated should thoroughly understand the economics of a profitable operation, be acutely aware of the aptitudes required in key line and staff positions, and be trusted by all levels of management. Finally, and perhaps most important of all, such an executive must enjoy the full confidence of top management as a "business man."

Few staff executives have sufficient breadth of experience to meet these qualifications. Two large companies have felt the challenge surrounding the motivation of executives sufficiently important to assign their top—and most effective—operating executives to the task. The chief executives of both these companies believe that the recruiting, training, and motivating of management offers the surest means of establishing a competitive advantage.

Industry is still on the threshold of assessing the most likely ways and means of "administering" the various elements of executive motivation. But the problem is a vitally important one, and it is becoming more critical with each increase in productive capacity.

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WHAT IS IRIDITE?[®]

Briefly, Iridite is the tradename for a specialized line of chromate conversion finishes. They are generally applied by dip, some by brush or spray, at or near room temperature, with automatic equipment or manual finishing facilities. During application, a chemical reaction occurs that produces a thin (.00002" max.) gel-like, complex chromate film of a non-porous nature on the surface of the metal. This film is an integral part of the metal itself, thus cannot flake, chip or peel. No special equipment, exhaust systems or specially trained personnel are required.

Chromate conversion coatings are widely accepted throughout industry as an economical means of providing corrosion protection, a good base for paint and decorative finishes for non-ferrous metals. Certain of these coatings also possess chemical polishing abilities that have luster-producing, as well as corrosion-inhibiting, effects on zinc and cadmium plate, zinc die castings and copper alloys. However, continued developments in this field have been so rapid that many manufacturers may not be completely aware of the breadth of application of this type of finish. Hence, this discussion of the many ways in which this chemical polishing characteristic can be used in final finishing or pre-plating treatments to produce a lustrous appearance with distinct display and sales appeal and appreciable savings in cost. Report I on decorative, corrosion-resistant finishes and Report II on paint base corrosion-resistant finishes are available on request.

The degree of luster possible on a surface is a function of the degree to which the surface can be smoothed. Leveling to provide a smooth surface can be achieved by mechanical or chemical means, or a combination of these, depending upon the luster desired and the original condition of the metal. Chemical polishing effectively imparts luster otherwise difficult and costly to obtain. For this reason, it is often used to supplement or entirely replace mechanical polishing, depending upon the application and the original condition of the metal. Chemical polishing has the additional advantage of providing overall treatment of the submerged part. It reaches into even the deepest corners and recesses that are otherwise inaccessible. Certain of the Iridites are specifically designed to perform this chemical polishing operation. Also, they provide corrosion protection as do all Iridites, thus may be used as a final finish or a pre-plating polish.

If Iridite is to be used as a final finish, in contrast to pre-plating treatment, the chromate conversion coating generated is allowed to remain, providing good corrosion resistance. Color inherent in these Iridite films ranges from a yellow cast to yellow iridescent. These coatings may be used without further treatment where this color is acceptable and good corrosion resistance is desired. Further, these basic coatings can be tinted by dyeing. Among the dye tints available are shades of red, yellow, blue and green. If desirable, the basic coatings can also be modified by a bleach dip leaving a clear bright or blue iridescent finish. In all cases bleaching reduces corrosion resistance.

As examples of this type of final finishing, Iridites #4-73 and #4-75 (Cast-Zinc-Brite) make possible for the first time, lustrous chemical polishing of the as-cast surface of zinc die castings. Thus, in many cases, sizeable savings in finishing cost are realized by elimination of plating costs. This economical method can be used on tools, appliance parts, toy pistols, locks and many other small castings. Another example is the treatment of copper and brass parts, such as welding tips, to eliminate buffing and provide additional corrosion resistance. In many cases, handling costs are reduced appreciably by replacing piece-part handling with bulk processing. Still another example of the use of this chemical polishing and protective quality of Iridite is a simple system of zinc plate, Iridite and clear lacquer instead of more costly electroplated finishes. Typical of this type of lustrous finish are builders hardware and wire goods.

As a pre-plating treatment, in contrast to final finishes, Iridite can be used to chemically polish zinc die castings or copper prior to plating. In such cases, Iridite should be applied as an in-process step, so that the protective film is removed before the plating cycle. The savings in hand-

ling, material and labor costs are obvious. This process has made it practical to plate chrome directly over copper on steel, conserving nickel, yet producing a lustrous chrome finish. Used after stripping faulty plate in reprocessing zinc die castings, Iridite restores luster to the casting, thus making possible replating without blistering.

Other Iridite finishes are available to produce maximum corrosion resistance, a wide variety of decorative finishes and excellent bases for paint on all commercial forms of the more commonly used non-ferrous metals. As a final finish, appearance ranges from clear bright to olive drab and brown and many films can be bleached or dyed. As a paint base Iridite provides excellent initial and retentive paint adhesion and a self-healing property which protects bare metal if exposed by scratching. Iridites have low electrical resistance. Some can be soldered and welded. The Iridite film itself does not affect the dimensional stability of close tolerance parts.

Iridites are widely approved under both Armed Services and industrial specifications because of their top performance, low cost and savings of materials and equipment.

You can see then, that with the many factors to be considered, selection of the Iridite best suited to your product demands the services of a specialist. That's why Allied maintains a staff of competent Field Engineers—to help you select the Iridite to make your installation most efficient in improving the quality of your product. You'll find your Allied Field Engineer listed under "Plating Supplies" in your classified telephone book. Or, write direct and tell us your problem. Complete literature and data, as well as sample part processing, is available. Allied Research Products, Inc., 4004-06 East Monument Street, Baltimore 5, Maryland.

THREE NEW APPRAISALS OF ENGINEERS

THE CARE and feeding of engineers has been a subject of absorbing interest to management ever since the breed became scarce in proportion to the ever-increasing need for it. Aside from whooping cranes and the duck-billed platypus, and perhaps the research physicist, chemist, and mathematician, probably no species these days is the focus of so much concern over what will make it happy, keep it functioning at highest efficiency, check its migrations, and increase its numbers.

Two new studies, designed to aid in recruiting, using, and keeping professional engineers, illustrate the trend; so does a third project, in which engineering staff members of a single company took a look at what makes them tick and then drew up a program to make themselves tick better, especially as management men or in their relations with the management of the concern with which they are associated.

One study, a survey of "Career Satisfaction of Professional Engineers in Industry," was conducted by Opinion Research Corp., Princeton, N.J., for the Professional Engineers Conference Board for Industry in co-operation with the National Society of Professional Engineers. Based on depth interviews with 265 professional engineers employed throughout the country by eleven of the nation's 200 largest corporations, it attempts to uncover the "non-salary career satisfactions" of engineers at three stages of professional experience—three to six years, ten to fifteen years, and twenty to twenty-five years. Subjects of the survey are employed in the aircraft, automobile, chemical, electronics, electrical machinery, heavy equipment, petroleum refining, and rubber industries.

In summary, this study showed, says the NSPE, that "(1) engineers must change their attitudes if they are to become good managers; (2)

opportunity for advancement and the chance to do creative work are rated as the most important job factors; and (3) three-fourths of the engineers in industry feel their education was deficient in certain areas."

The second study, issued in a series of three reports entitled "Profile of the Engineer," is a bringing-together and analysis of many previously isolated findings regarding engineers. The job was done by the research department of Deutsch & Shea, Inc., consultants in the technical manpower field. Aimed at helping the recruiter identify and attract the best new talent and helping the company reduce high turnover, it deals with the American engineer's intelligence and abilities, distinctive personality traits, social attitudes, work habits, and recreational activities.

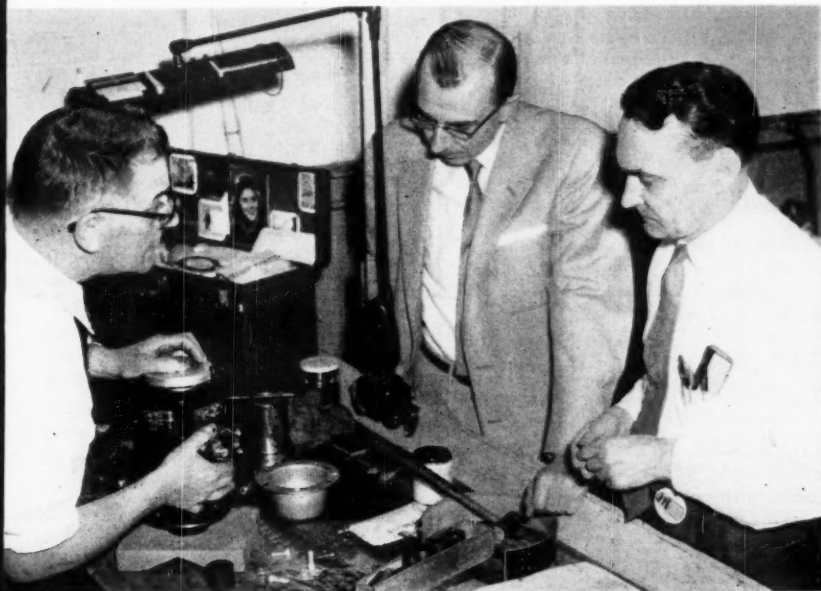
In the third project, engineers of Jack & Heintz, Inc., Cleveland, Ohio, from the engineering vice president down to the newest project engineer, met under guidance of George W. Kenning, a Rutherford, N.J., consultant, to whip up, on a do-it-yourself basis, some answers on how to:

1. Determine the responsibilities an engineer-manager should fulfill.
2. Incorporate administrative duties with technical skills.
3. Obtain and apply needed departmental decisions.
4. Produce on-time, functional actions and answers.
5. Appreciate engineering's part in company operations.

Meeting in small groups, they discussed their duties, skills, and responsibilities in relation to (a) managerial requisites to successful engineering operations, and (b) what part of a managerial job an engineer must perform for department operations to be successful.

Curiously differing — though not necessarily contradictory — findings occur in regard to human relations problems in the three reports.

Deutsch & Shea, for example, find



As part of a program of self-appraisal leading toward self-improvement, Jack & Heintz engineers study company operations to see how much of their job is managerial.

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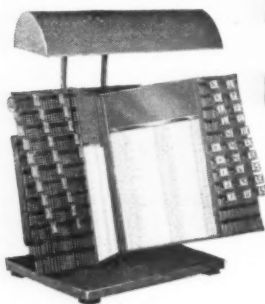
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1654	Glover, Betty	109	1456	3	10
1005	Barber, Mr. W.	111	1293	7	29

SENIORITY LISTINGS

NAME	DEPT	JOB CLASS	PLANT	DEPT
Williamson, George H.	45	March Mgr	11-11-45	12-16-48
Johnson, Walter	45	March Mgr	11-25-44	12-23-48

BIN LOCATIONS

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that the typical engineer has above-average mental ability but restricts application of his intelligence to a particular field or specialization. "Responses to personality tests," they report, "reveal the engineer has paid for his devotion to mechanical and impersonal matters at the expense of his development as a social being. He applies far less intelligence to human relations than he does to purely technical matters, shows little interest in the social sciences, public affairs. . . . These tendencies apparently date back to the engineer's college days, when he showed a marked distaste for English and 'cultural' subjects. Engineers in applications, product design, and operations are particularly cautious and conformist in personal and social relations."

The NSPE survey, which reports that 67 per cent of engineers with three to six years' experience and 76 per cent with greater experience said things were lacking in the college training they received, shows that human relations know-how is one of the subjects in which most engineers would most like company training. Three top desires for company-sponsored courses:

1. Organization and planning.
2. How to supervise.
3. How to handle people.

If engineers (as Deutsch & Shea find) are clumsy in human relations, at least, according to the NSPE survey, they are aware of it and would like their employers to help them remove the defect. One possible clue to an engineer's feeling of unease is the Deutsch & Shea report that engineers feel themselves superior in the company hierarchy to accounting, personnel, public relations, and advertising staff, but a substantial number think they are accorded less importance than the production and sales departments. One good place to start improving their human relations skills might well be in ridding themselves of this rigid hierarchical concern. Not "where do I stand?" but "what can I do to make the other fellow feel important?" provides a good basis for getting along well with others.

The conclusions of the Jack & Heintz engineers, and the "approaches" they worked out for solving engineer-manager problems, bear heavily on human relations, too. Their five major "problems" and proposed solutions are worth noting:

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Problem: Some engineers do not accept managerial responsibilities. The engineer, even when in a position of management responsibility, is inclined to measure his value by his individual efforts rather than by the accumulated contributions of those who report to him.

Approach: Convert to a line form of organizational control to encourage the engineers to accept management responsibility.

Problem: Engineers generally believe they rise to the management level because of superior technical competence. They fail to use—may not even know how to use—managerial talents such as “people skills,” good organizational practices, and so on.

Approach: Drill the engineer in organizational education and effective management practices by creating situations in which it becomes necessary to use such tools.

Problem: Many engineer-managers do not realize that it is their responsibility to represent the men reporting to them, in communicating with their superiors—and vice versa.

Approach: Through accurate representation and interpretation of related policy and procedure, get the engineer to enlist organization support in counselling those who report to him.

Problem: The engineer-manager is sometimes reluctant to handle personal problems, situations, and requests of those reporting to him.

Approach: The engineer must learn that a well-informed and loyal work group will enhance his own position. As a member of management, he is not doing his part when he fails to answer questions, fails to answer them on time, delays making decisions, and so on.

Problem: Frequently the engineer-manager fails to appreciate values of other departments, is unaware of what others are doing and can do to make engineering operations successful.

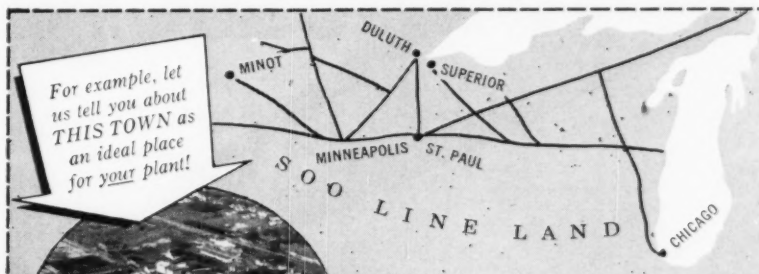
Approach: The engineer must learn and understand how he can help himself and his department by knowing what organizational services are available and by using them effectively.

How the Jack & Heintz program will work out, neither Kenning nor the company can say: it is too new for results to be determined.

The PECBI-NSPE survey, which was reported on orally at a recent NSPE annual meeting, has not yet been published. When it is, it will be available from the Professional Engineers Conference Board for Industry, 2029 K St., NW, Washington 6, D.C. (Previous reports in the same series have cost \$2 each.) The Deutsch & Shea reports are \$7.50 for the set of three, from Industrial Relations News, 230 West 41st St., New York 36.

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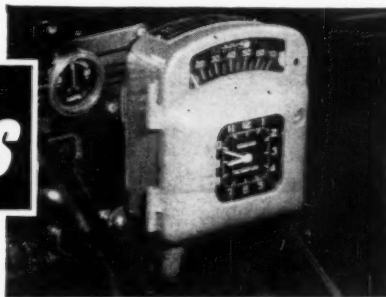
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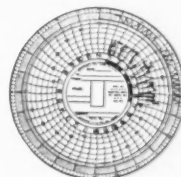
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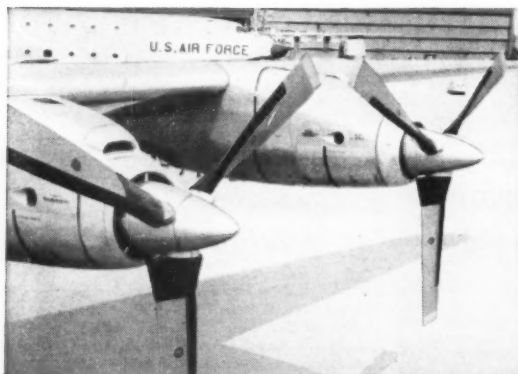
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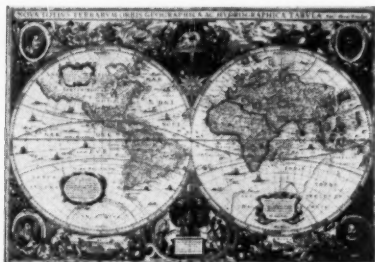
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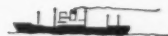
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INTERNATIONAL



MARKETS



ALEXANDER O. STANLEY, *Editor*

NEW DIMENSIONS IN LATIN AMERICAN MARKETS

LATIN AMERICA—"land of mañana" in a new sense—is today in the throes of economic ferment. The final dimensions, even the precise direction, of its commercial and industrial growth cannot yet be statistically predicted. But all the evidence suggests that from the business viewpoint the "Green Continent" is indeed the land of the future.

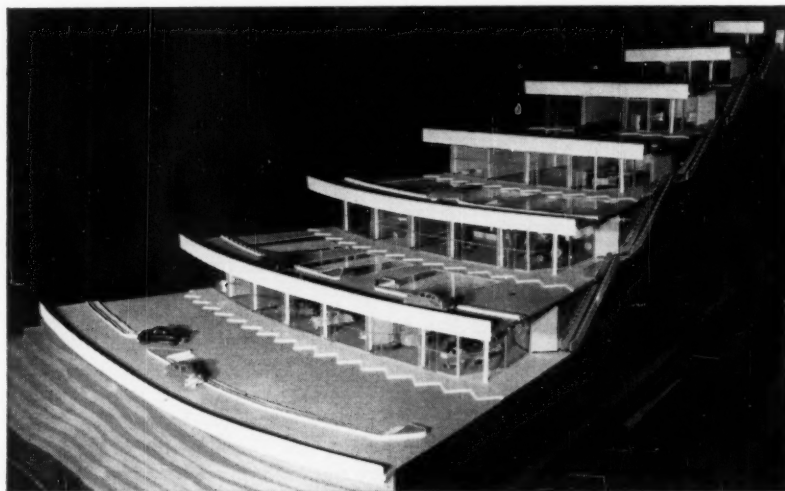
It is an area of huge dimensions, in terms of people, places, and products, and of violent contrasts. It's July in January on Calle Florida, the modern business thoroughfare of Buenos Aires, which is thronged with smartly dressed shoppers. But only a few hundred miles to the West, bitter cold winds howl around the deserted peaks of Mt. Aconcagua

A rapidly expanding population, heavier inflow of U.S. and foreign capital, and the quickening pace of its industry and commerce are broadening the economic base of Latin America. How do its assets add up in terms of people, products and natural wealth, and what are the liabilities and future prospects of this rich area? These are the factors reviewed in this study of the key markets south of the border.

(elevation, 23,075 feet). At nearby Mendoza, gateway to Chile, a statue of Christ keeps lonely vigil on the "great divide" of South America—the Andes. Far to the north, the broad savannahs of Venezuela bake in the sun, while only a few hundred miles away, white-clad government executives sit in air-conditioned Caracas offices discussing how to sow millions

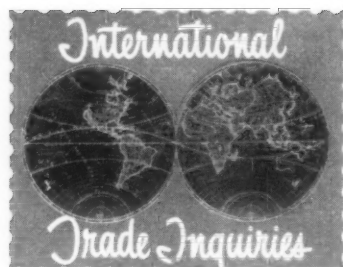
of dollars of oil royalties back into modern factories, roads, and housing for modern Venezuela. To the north, Mexico digs out from under the damage of the recent earthquakes and Cuban roads are racked with gunfire as the Batista government battles to remain in power.

These vignettes illustrate some of the fundamental aspects and prob-



Caracas, Venezuela, is about to get something very different: a shopping center that climbs up instead of spreading out. Shown above in a model, the center will contain, among other features, 320 small stores, industrial showrooms, a hotel, a swimming pool, garages, and business offices, not to mention a business men's club and seven theaters. Because of the contours of the mountain on which it is being built, the center will be ten stories high on one side and 25 stories high on the other. The base will cover about 25 acres. With construction already started, the \$25 million structure is scheduled for completion in 1960.

Photograph by
Hamilton Wright



As a service to its readers, DUN'S REVIEW AND MODERN INDUSTRY prints the following listings which are submitted without recommendation or commitment on its part. Rates for listings on application.

TO BUY

ARGENTINA

- 0292 Wishes to purchase newsprint, Kraft wrapping paper. SELCA S.R.L., 222 Corrientes, Buenos Aires.

BELGIUM

- 0293 Wishes to import advertising specialties and all kinds of novelties. ETABLISSEMENTS NOREL (importer of advertising gift articles and material, and curios and novelties, manufacturer, exporter of plastic articles electronically soldered), 44 Ave. Georges Henri, Brussels.

INDIA

- 0294 Wishes to purchase direct one complete economical plant to manufacture straw board and wrapping paper from rice straw and bagasse. SATYANARAIN KANAHIYALAL (manufacturer of sugar and jute goods, wholesaler of textiles and sugar), 26/54 Kasturba Gandhi Road, Kanpur, Uttar Pradesh.

ITALY

- 0295 Wishes to purchase direct aluminum slats for venetian blinds, LEONINA (importer of painted aluminum tapes, cotton tapes, and ropes, manufacturer and wholesaler of venetian blinds), Via Antonini 25, Milan.

GERMANY

- 0296 Wishes to purchase direct and seeks agency from U.S. stocking manufacturers for approximately 70,000 dozen nylon stockings, with the following specifications: 51-gage, 15-, 50-, 30-denier; 54-gage, 15-, 20-, 30-denier; 60-gage, 10-, 20-, 30-denier; and seamless stockings, 400-needle. KARL VINCENC (importer, exporter, manufacturer's agent), 37 Himmelgeisterstrasse, Dueseldorf.
- 0297 Wishes to purchase direct and act as selling agent on a commission basis for U.S. manufacturers of any article which can be used in coal mining. NEWAG, MASCHINEN-, APPARATE- U. GERATEBAU, TECHN. HANDELSGESELLSCHAFT (manufacturer), 28 Prinz-Abrecht-Strasse Duisburg.

NETHERLANDS

- 0298 Wishes to purchase direct electric household appliances, oil heating stoves, and refrigerators. FIRMA J. C. WESTENBERT (importing distributor of electric tools, oil heating stoves, and refrigerators), 308 2e Schuytstraat, The Hague.

UNION OF SOUTH AFRICA

- 0299 Wishes to purchase direct a full line of diabetic foods. Firm desires samples. ARTHURS' LTD. (joint food buying organization for 2 large Durban department stores), P.O. Box 210, Durban.

TO SELL

ENGLAND

- 0300 Wishes to export direct 1,000 tons monthly of first-quality heavy bright rolled flats, flat-wire, precision flats, and cold rolled strip. JOHN H. BOALER, LTD. (export, import, wholesaler, and buying merchant), 195 Icknield St., Birmingham 18.

GERMANY

- 0301 Wishes to export direct or through agent metal advertising signs for display windows, 5,000-6,000 signs available monthly. ERWIN BRAUN (manufacturer of metal dials, advertising signs; exporter), 31 Staufenstrasse, Schwenningen a. Neckar.

- 0302 Wishes to export hair fineries, combs, and technical articles of celluloid and plastics. ERNST KUESTER KOLIBRI-WERK (manufacturer, exporter of combs and hair fineries from celluloid and plastics), 30 Krumme Weide, Schoetmar-Lippe.
- 0303 Wishes to export direct nonelectric dry shaver Liliput, and frozen food knives of finest stainless steel. ERICH KORTEN (exporter of cutlery), 42 Suedstrasse, Solingen-Ohligs.
- 0304 Wishes to export direct or through agents, in New York, Philadelphia, New Orleans, St. Louis, Chicago, Detroit, Los Angeles, San Francisco, and Seattle, 1,500 to 2,000 monthly of various sizes of hydraulic door closers. ASBECK & NELLING (manufacturer), Ennepetal-Altenvoerde.
- 0305 Wishes to export direct or through agent wire rope clamps, dead eyes for hemp and wire ropes, shackles, tension hooks, turn screws, ring nuts, and eye hooks. W. WAGNER (manufacturer), Koebinghauser Hammer, Piettenberg-Westf.
- 0306 Wishes to export direct or through agent roller chains in simplex duplex, and triplex execution. MASSEY-HARRIS-GERGUSON ABT. ROLLENKETTEN (commission merchant, exporter handling roller chains), Koeln-Westhoven.
- 0307 Wishes to export direct or through agents tamping and flat rollers of all kinds. EISENWERK MICHAEL SCHMITZ (manufacturer of tamping rollers, and flat rollers of all kinds), 26 Bahnstrasse, Mechernich-Eifel.

TO REPRESENT

BRITISH WEST INDIES

- 0308 Wishes to obtain agency for lingerie, blouses, knitwear, and hosiery for ladies, and socks, shirts, underwear, and ties for men. IMPEX MANUFACTURING & TRADING CO., LTD. (manufacturers' agent), 16 St. Vincent St., Port of Spain, Trinidad.

ENGLAND

- 0309 Seeks agency for machinery for mines, collieries, quarries, etc. BARRETT GREENE & CO., LTD. (agent, colliery engineers), Walton Grange, Stone, Staffordshire.

FRANCE

- 0310 Seeks agency for good-quality flooring, wood panels and wainscoting, wood fibers and related products for the building trade and industrial uses. ANCIENS ETABLISSEMENTS J. & A. GUY (wholesaler, retailer, potential selling agent), 12 boulevard Carnot, Toulouse, Haute-Garonne.

GERMANY

- 0311 Seeks agency from U.S. producers and refiners of lubricating oils, including bright stock, neutral oils, high-grade motor oils, and superheated steam cylinder oils. IMPORTUND HANDELSGESELLSCHAFT W. WILLHOEFF & CO. (importing distributor and manufacturers' agent for lubricating oils, manufacturer of foodstuffs), GlockengieBerswall 2-4 Hamburg 1.
- 0312 Desires exchange of experiences and know-how with U.S. producers of supermarket equipment in order to apply in the German market the latest knowledge of the U.S. shop construction. GEBR. BROECKER O.H.G. (manufacturer of interior equipment for supermarkets), 21-23 Heidestrasse, Wuppertal-Cronenberg.

PERU

- 0313 Seeks agency for cotton and linen-lined table cloth, and for shirtings of poplin and other cotton fabrics; also rayon, nylon, and rayon fabrics. JOE FRANCO (manufacturer's agent, commission merchant), P. O. Box 761, Lima.

VENEZUELA

- 0314 Wishes to obtain agency for earthmoving equipment and construction machinery. OFICINA TECNICA JAIMES (importing distributor), Centro Profesional del Este, Caracas.

lems of the 29 markets that constitute Latin America today. They make a gaudy backdrop on the black and white statistics of the market—and they accent the need for understanding the motivations of the people. Here the interplay of social, political, and economic factors—as varied as the people themselves—must be taken into account. The fierce individualism of the Latin Americans that defies mass classification and the insistence of each ethnic group on its own tradition, characteristics, and future have both contributed to the erratic course of the individual countries. But this rugged individualism has been necessary in expanding the perimeter of civilization across the jungles, the plateaus, the peaks, and the pampas of this rich and variegated land.

Four hundred years of sustained effort have made a deep imprint on Latin America. There are bustling cities in which millions of people work and live. Long miles of railways, airways, and highways bind thousands of communities. Modern communication systems maintain business and social contact among millions of people. New factories stud the landscape, powered by increasing banks of electrical generators. New buildings to provide for the growing public are replacing those centuries old. While the dust of demolition settles, the needs of business grow. And to accommodate one of the highest birthrates in the world, new hospitals and new schools are being hastily erected.

A Brighter Future

In terms of economic progress Latin America has taken tremendous strides forward during the past 40 years, but in terms of its economic potential it is only beginning to realize its destiny. Postwar gains have been impressive, if overshadowed by the industrial resurgence of Europe. In fact, Latin America has been relatively forgotten so far as our foreign aid programs are concerned. And its mostly privately-financed progress is all the more remarkable in a world clamoring for economic sustenance, largely through U.S. aid.

What are its assets and liabilities today? What will be the areas of expansion tomorrow? To see these in proper perspective, the initial focus must first be on Latin America as a single economic bloc of nations with

common problems and prospects. Against this composite picture, the weak and strong markets stand out in sharp relief. The lack of uniform statistical methods and the lag in reporting basic economic data require a generous interpretation of available statistical components. But even from the fragmentary facts available impressive evidence emerges that Latin America has the people, the products, the latent power to become an economic colossus in the years immediately ahead.

The Assets of Latin America

Here are the assets that indicate the potential:

- Population estimates tallied 181 million at mid-1955, up 25 million, or 16 per cent, from the 1950 census.

PRINCIPAL POPULATION GROUPS (millions of people)

Argentina	19.1
Brazil	58.4
Chile	6.7
Colombia	12.6
Cuba (1944)	5.8
Mexico	29.6
Peru	9.3
Venezuela	5.7

- Almost 30 per cent of the population was busy in the fields, the factories, the offices, the mines, the stores. The 1950 total: 45 million. The 1956 estimate: a possible 50 million in the economic population.

PRINCIPAL LABOR GROUPS (millions of people)

Argentina (1947)	6.4
Brazil	17.1
Chile	2.1
Cuba (1953)	1.9
Haiti	1.7
Mexico	8.3
Venezuela	1.7

Figures on Peru, Colombia not available

- Agriculture still ranks as the No. 1 activity in terms of employment. Twenty-four million Latin Americans toil to produce the coffee, sugar, cotton, and wool—key crops—to feed and clothe the people of the world. But new stores, new businesses, and new services have been attracting a larger segment of the working population, providing jobs for upwards of 11 million in commerce and services.

PRINCIPAL AGRICULTURAL, SERVICE GROUPS (millions of people)

	Agriculture	Services, Commerce
Argentina	1.6	2.2
Brazil	10.3	3.7

Chile	0.6	0.7
Cuba	0.8	0.6
Haiti	1.4	0.1
Mexico	4.8	1.5
Venezuela	0.7	0.4

(Data not available on Peru, Colombia)

- The swelling total of manufacturing plants and the stepped-up pace of utilities provided jobs for almost 8 million men and women by 1950. By 1952 industrial output made a historical breakthrough, exceeding agricultural production for the first time. The industrial labor pool should show significant gains when the next statistics are released.

PRINCIPAL INDUSTRIAL LABOR GROUPS (millions of people)

Argentina	1.7
Brazil	2.2
Chile	0.5
Cuba	0.4
Mexico	1.2
Venezuela	0.2

- Output per person has followed a steadily rising curve, reaching an estimated annual level of \$388 per farm worker and \$1,057 per industrial worker for an annual growth trend of 2.25 per cent since 1934 (conversion at 1950 dollar rate).

- Transportation and communication systems employed somewhat under 2 million people in 1950. This group may show only small increases, since improvement and expansion in this field involves extensive mechanization and the installation of new electronic facilities, requiring smaller additions to personnel than the average for other functions.

PRINCIPAL TRANSPORTATION AND COMMUNICATION LABOR GROUPS (millions of people)

Argentina	0.3
Brazil	0.6
Chile	0.09
Cuba	0.1
Mexico	0.2
Venezuela	0.05

- Of 24,659 U.S. personnel stationed abroad with U.S. companies having international branches or affiliates, 42 per cent, or 10,493, are located in Latin America.

This small cadre heads a total payroll of 486,767 nationals employed by U.S. companies in Latin America, or almost 40 per cent of 1,280,696 nationals working in the plants and offices of American business overseas. These data are based on a survey of 646 U.S. companies recently com-

pleted by Syracuse University.

The firms surveyed included: 544 manufacturers and sales and service organizations; 30 oil companies; 49 engineering and construction companies; 23 concerns engaged in raw material procurement.

- Domestic manufacturing, measured in terms of the national currency of each of eleven countries, shows dramatic progress in a statistical spread of years from 1950 to 1955. But the statistics require correction for severe currency devaluation. In some instances, they are impossible to correlate because some are analyzed for net, others for gross product. As a soft statistic, however, it has been estimated that manufacturing output was \$10 billion in 1952 and is currently expanding at an annual rate of 6 per cent.

PRINCIPAL MANUFACTURING COUNTRIES (free rate conversion, year of study)

Year	Net Product (billions)	Per cent gain 1950-55
'55 Argentina	\$1.050#	+133
'53 Brazil	1.400	+134
'54 Chile	0.272	+270
'54 Colombia	0.372	+ 80
'54 Cuba	0.869	°
'50 Mexico	0.806	°
'55 Peru	0.204	+ 81
'51 Uruguay	0.470#	°

gross product; ° not available

CURRENCY DEVALUATION BETWEEN 1950-1955 (Free Rate)

	%
Argentina	-47
Brazil	-71
Chile	-80
Colombia	-23
Cuba	none
Mexico	-30
Peru	-23
Uruguay	-43

- Farm output in 1952 reached \$8 billion, a slow improvement of 14 per cent in a period of seven years, in contrast to manufacturing output, which jumped 40 per cent in the comparable period. Annual improvement in farm output is calculated at 2 per cent.

AGRICULTURAL PRODUCT OF PRINCIPAL COUNTRIES (in billions)

Year	
'55 Argentina	\$0.803
'53 Brazil	2.200
'54 Chile	0.229
'54 Colombia	0.890
'54 Cuba	0.517
'50 Mexico	0.623
'55 Peru	0.395

- Total gross product of Latin Amer-

ica as a whole was near the \$40 billion point in 1952, up substantially from \$28 billion at war's end in 1945. Estimated for 1956: \$50 billion.

\$9.3 billion at the end of 1956, these accounted for 10 per cent of world imports, up 8 per cent over 1955.

can economy in the five-year period ending 1955. This is 6 per cent of the world's total gold product.



Hamilton Wright Photograph

Celanesa Colombiana, a South American affiliate of Celanese Corp. of America, produces acetate yarns and staple fibers for Colombian textile industry, in addition to resins and emulsions for other industries.

GROSS PRODUCT OF PRINCIPAL COUNTRIES (in billions)

Year	
'55 Argentina	\$4.460
'53 Brazil	8.400
'54 Chile	1.523
'54 Colombia	2.192
'54 Cuba	1.756
'50 Mexico	3.682
'55 Peru	1.282
'55 Puerto Rico	1.005

• Last year, exports to the world were at a ten-year high of \$9.6 billion. Except for a slight dip in 1952-1953, these have steadily expanded, showing a 10 per cent gain in 1956. In relation to world exports, Latin America's share was 8 per cent.

EXPORTS OF PRINCIPAL COUNTRIES (in billions)

Argentina	\$0.944
Brazil	1.482
British West Indies	0.329
Chile	0.543
Colombia	0.599
Cuba	0.666
Mexico	0.705
Neth. Antilles	0.841
Peru	0.308
Uruguay	0.211
Venezuela	2.043

• Imports from the world have followed a parallel upward trend, although not to the same degree. At

IMPORTS OF PRINCIPAL COUNTRIES (in billions)

Argentina	\$1.128
Brazil	1.234
Br. West Indies	0.375
Chile	0.354
Colombia	0.657
Cuba	0.627
Mexico	1.072
Neth. Antilles	1.062
Peru	0.361
Uruguay	0.206
Venezuela	1.158

• In its world exchange of goods, Latin America has cleared a profit (plus balance of trade) during five of the past eight years. The combined plus balance during this period was \$1.4 billion, of which \$321 million was realized in 1956. But capital repatriation, dividend payments, interest charges, and a multitude of outflowing payments make this only a paper profit subject to correction.

BALANCE OF TRADE HIGHLIGHTS (in millions)

Argentina	— \$184
Brazil	+ 248
Chile	+ 189
Mexico	— 367
Neth. Antilles	— 221
Venezuela	+ 885

• Gold production contributed an annual average yield of some \$60 million (based on a rate of \$35 U.S. per fine ounce) to the Latin Ameri-

PRIMARY GOLD PRODUCERS IN 1955:

(in millions)	
Brazil	\$ 5.0
Chile	4.3
Colombia	13.3
Mexico	13.2
Nicaragua	8.1
Peru	5.7

• Gold holdings have remained close to the level of \$1.9 billion, or 5 per cent of the world total, during the seven years ended December 1956.

MAJOR GOLD HOLDINGS (in millions)

Brazil	\$324
Cuba	136
Mexico	166
Uruguay	186
Venezuela	570

• Foreign exchange holdings have steadily expanded since 1951 from \$850 million to the December 1956 level of \$1.575 billion, or 7 per cent of the world total. This compares with \$150 million in 1937, \$1.275 billion in 1948.

MAJOR FOREIGN EXCHANGE HOLDINGS (in millions)

Brazil	\$288
Cuba	343
Mexico	273
Venezuela	339

• More than \$7 billion, an all-time high representing almost one-third of all U.S. business investments abroad, is invested in Latin America



Brazilian Government Trade Bureau

American heavy industry is represented in Latin America, too. In a Brazilian showroom, International Harvester displays native-produced trucks, materials handling equipment.



Birthplace of a new kind of hydraulic safety

The Navy had a problem. Highly flammable hydraulic oil is too dangerous to use aboard carriers. Yet, in addition to fire-resistance, hydraulic fluids must also provide the oil-like efficiency needed in huge hydraulic elevators and catapults.

The problem was solved by teaming a brand new Houghton phosphate ester fluid with a proved Houghton water-glycol product.

The new development in the Houghto-Safe phosphate type fluid is now being supplied for hydraulic elevators on Navy carriers. The Houghto-Safe water-base fluid has been used

in Navy hydraulic aircraft catapults for nearly four years.

Being the first supplier of fire-safe fluids for *both* elevators and catapults adds to the long line of famous Houghton hydraulic "firsts". And the same Houghto-Safe is playing a major role in the hydraulic safety trend snowballing through industry.

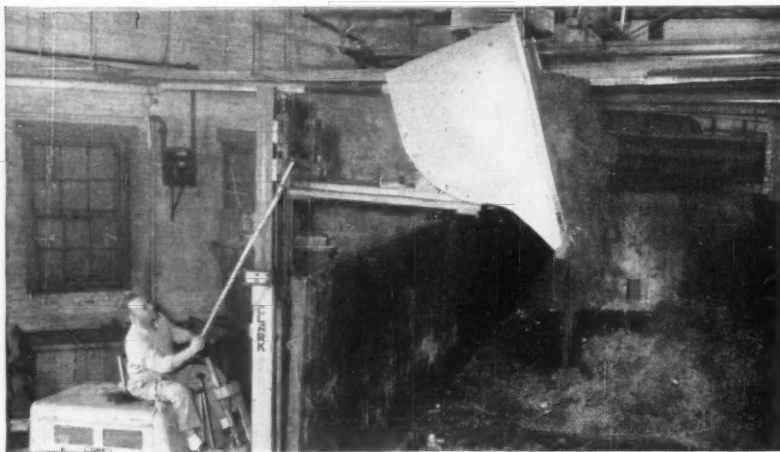
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American Rivet Co., Chicago, replaced oil drums with 15 Roura Self-Dumping Hoppers for collecting metal scrap. These Hoppers, labeled to indicate the type of scrap they contain, are stationed in the machining areas. Chips and turnings, collected in tote pans, are emptied into the Hoppers. When full, a standard lift truck moves the Hoppers to the loading dock. The operator merely flips the latch and the Hopper automatically dumps its load into

the dealer's truck, then rights itself, locks itself and is ready for another load. One man does the entire job. Scrap, segregated by type, brings higher prices. Handling costs are cut to the bone.

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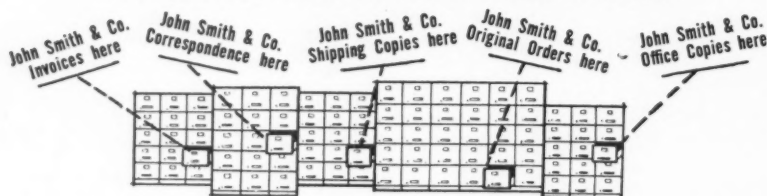


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by U.S. business. This is double the capital employed a decade earlier. Figures are based on a 1955 survey by the U.S. Department of Commerce, covering 300 U.S. companies with nearly 1,000 subsidiaries and branches in Latin America.

Total sales for 1955: \$4.9 billion, or almost 10 per cent of the Latin America gross domestic product.

Paid in salaries and wages: \$1 billion.

Total workers on payrolls: 600,000, with Americans constituting about 1.5 per cent of the total staff.

The group surveyed represented 85 per cent of total assets of U.S. companies in Latin America. Its operations used up only \$1.3 billion in foreign exchange, created a revenue flow of \$2.3 billion through capital flow and exports, and accounted for 30 per cent of all Latin American exports. Of the products produced, \$2.7 billion were absorbed in the individual markets, thereby saving needed foreign exchange, creating jobs, and building profits for local distributive agents.

Tax payments of over \$1 billion by the companies reporting in the survey account for roughly 15 per cent of all government revenues in the area and 30 to 40 per cent of all direct taxes on income and profits. About half the taxes were paid by petroleum companies, largely in Venezuela. The rate of direct income taxation on U.S. companies in Latin America, as calculated from these reports, ranged from about 63 per cent in the mining industry to 47 per cent in petroleum and 37 per cent for manufacturing.

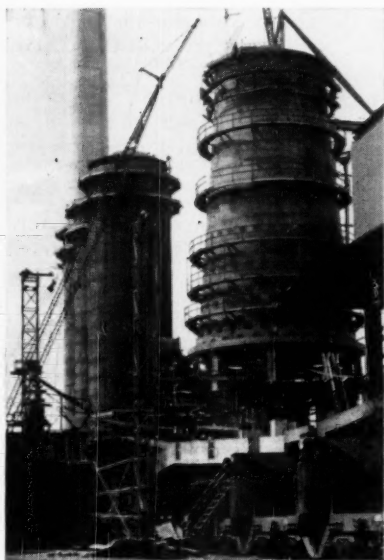
These, then, are some of the significant assets of the Latin American balance sheet. But a balance can be struck only if the liabilities are examined also.

Liabilities of Latin America

On the less favorable side are the following facts:

- Latin America absorbs only 10 per cent of its own exports and provides only 12 per cent of its own import requirements.

- It is heavily dependent on the United States and Canada as outlets for its exports (46 per cent), and as suppliers of its import requirements (49 per cent). Any economic readjustment in these two hard-currency areas would create a severe dollar-exchange upset for Latin America,



Brazilian Government Trade Bureau

One of the bank of blast furnaces of Brazil's expanding steel industry. Government-owned Volta Redonda (National Steel Company) produces 700 tons of steel daily, or about 60 per cent of Brazil's current needs.

which is already hard put to maintain its exchange position.

- Basic commodities and raw materials still predominate as the key earners of dollars, Deutschmarks, guilders and Sterling. Coffee is king, accounting for 26 per cent of exports. Petroleum is a close second at 20 per cent. Sugar amounts to 9 per cent; cotton, 4 per cent; wool, 3 per cent. Any glut in production or any weakening in prices will spell trouble. The Chilean dilemma caused by the recent cutbacks in copper production is a specific illustration. And of late, export prices for a number of major products have levelled off or declined.

Financial Considerations

- Currency maneuvers and multiple exchange rates not only cause statistical headaches but also create an uneasy atmosphere for trade and investment. And a high exchange rate not only inhibits imports from abroad. It also deprives local business of profits and the local population of needed goods.
- Constant changes in import regulations add to the unease and make long-range planning virtually impossible.
- Expropriation in different guises continues to cast a shadow on foreign investment plans. A case in point

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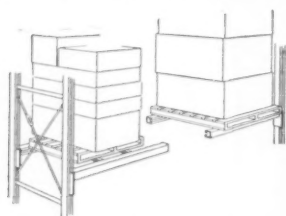
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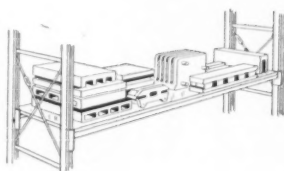
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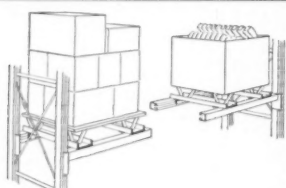
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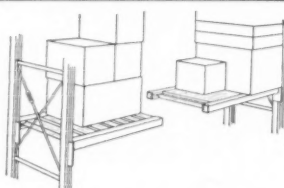
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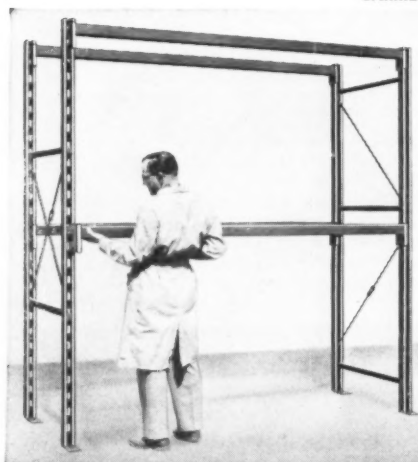
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is the abrupt cancellation in Argentina of the contract with the CADE utilities enterprise.

- Onerous liabilities for separation pay make it difficult to release an inept or uninterested employee for cause.

- Inadequate power, water, transportation, and communication facilities—due sometimes to government ownership, sometimes to restrictive regulation or overnight edicts—complicate expansion programs.

- Severe inflation is reacting viciously, on an already thin purchasing power. Items: Argentina, off 73 per cent; Brazil, off 70 per cent; Chile, off 93 per cent; Mexico, off 45 per cent; Peru, off 55 per cent. All these declines took place in the nine years between January 1948 and December 1956 (see "Key Factors in Foreign Currencies," DR&MI, August).

- Currency in circulation per capita is low, evidence of low living standards. Items: Brazil, \$18; Chile, \$14; Colombia, \$11; Mexico, \$14; Peru, \$12. (For definition and details of this study see pages 90, 96, 97, DR&MI, August 1957.)

- There is a high degree of illiteracy in some of the key markets and many of the smaller ones. Items: Brazil, 51 per cent; Colombia, 44 per cent; Peru, 58 per cent; Venezuela, 48 per cent. (The Colombian and Peruvian data are for the years 1938 and 1940 respectively.)

- The number of women in the labor force is low. Of the total number of people working in Latin America only 19 per cent were women. Contrast this with 27 per cent in the United States, 38 per cent in France, 35 per cent in Germany, 31 per cent in England, 38 per cent in Japan, and 39 per cent in the Philippines (all 1950 statistics). Interestingly enough, the weaker the country economically, the fewer the women employed. Items: India, 15 per cent; Pakistan, 5 per cent.

- A chronic tight money condition results from high interest charges. Loans supported by high-grade collateral carry interest at 8, 10, and even as much as 20 per cent. This may create an Eldorado for the lender, but it stifles expansion and inhibits the development of small business.

- Commercial credit terms are protracted. To the trade, credit periods range between 90 and 180 days and encourage inventory pile-up and stagnation. They also create slow-moving

receivables, which are difficult to discount. And long credits react all along the line. In effect, they develop working capital for the retailer at the expense of the wholesaler and for the wholesaler at the expense of the manufacturer, with the risk ascending in the same order. This method creates a drag on sales, encourages overextension, and cuts down trade activity. The usual concomitant is a high markup on merchandise, which leads to consumer resistance. Unit profits must be kept high because volume is low.

- Involved bookkeeping techniques are practiced to confuse the government (and save taxes) and to cajole suppliers (to get the largest and longest credit line). Sometimes this system even confounds the owners of the business into withdrawing profits that exist on paper but not in fact. Three sets of books are not uncommon, and some surprising bankruptcies have been the result.

- Contradictory and confusing economic statistics are released to impress by comparison with those of other countries or to suppress the true facts. The methodology is flexible and adjusted to yield the result sought for, making correlation in time and detail an exercise in imagination. To equate the imponderables is always the prime requisite in most statistical studies of Latin America.

Liabilities are always the unpleasant facts of economic life. From an objective point of view they represent obstacles that must be removed if Latin America is to realize its true potentials.

The Long-Range Potentials

To evaluate the profit potentials, it is necessary to take into consideration not only the assets and liabilities listed above, but the following trends and developments:

- Increasing at twice the world average, the Latin American population should reach a total of 225 million by 1965. This suggests that the level of economic activity will rise, especially in the field of light manufacturing. Growth in the secondary industries of Latin America has become closely linked in recent years to growth in population.

- The persistent shift of labor from the farms to the factories is expected to continue, creating more purchasing power. The side effects, especially on transportation, communication,

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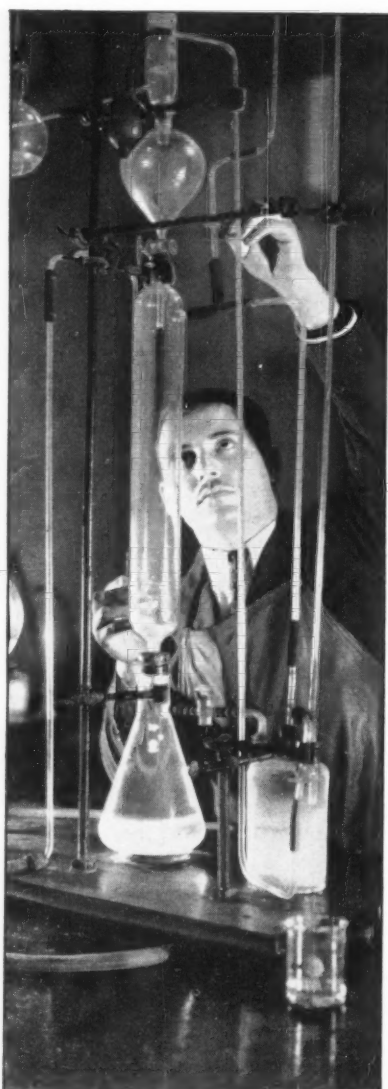
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and the utilities providing power, lights, and water in the urban areas, will be of major proportions.

- The slow progress in mechanizing and improving farm techniques may be accelerated as the farm labor pool shrinks because of growing job opportunities in the city.

Economic Blocs?

- Economic integration or the "common market plan" may be developed piecemeal and could lead to the creation of several strong economic blocs in Latin America in the next two decades. The Central American bloc ODECA—Organization for Central American Economic Development—involving Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua, is out of the talking stage. It has now been submitted for ratification to the governments of those countries. Proposed is a modified free trade area with a combined population of 10 million people, accounting for a world trade interchange of more than \$800 million (imports of \$415 million, exports of \$419 million). A three-stage program has been blueprinted:

1. The gradual elimination of import and export taxes and quantitative controls on some 40 per cent of articles moving in trade between Central American countries. Imports from countries outside this bloc are to enter at a common tariff rate.

2. Free trading rights and special tax benefits are to be offered to attract foreign investments in specific industries.

3. The creation of a long-range joint economic development fund with capital initially provided by members of the bloc is the capstone of this economic program. If it becomes operative it will eliminate the waste of tariff-protected small industry and lay the groundwork for mass production and mass consumption.

The British West Indies merger is a *fait accompli*. It will begin functioning early in 1958 after elections are held to the newly established Federal House of Assembly. Although the initial stage is one of political unity, it is expected that a customs union may be achieved.

One step in this direction has already been taken. A common currency unit known as the West Indies Dollar, linked to the pound sterling and having a quoted rate of approximately 58 cents, will be the formal

medium of exchange. The islands comprising the bloc are Barbados, Jamaica, Trinidad (seat of the new government), Tobago, and the Leeward and Windward islands. In 1955 this bloc had a combined population of 3,481 million, and an economically active population of 462,000. It exported \$329 million worth of goods and imported \$375 million worth.

And other plans involving other Latin American groups are being discussed. The idea of economic merger has captivated the interests of many Latin American government leaders, and at the least there may be a more tolerant attitude toward economic cooperation.

- A better, more consistent methodology in developing economic statistics can be expected. As economic operations expand, the need for speedier release of data and more accurate figures will become pressing. And larger-scale activities will justify the expense of using modern data-processing equipment.

Attracting Foreign Capital

- The accent on encouraging foreign capital investment will continue, with emphasis on tax inducements and protection of capital and profits. But there may be a shift toward attracting light industries, which involve less capital outlay and risk. Within this framework the licensing or royalty type of agreement offers many advantages, since it calls for smaller capital outlays and a larger proportion of know-how investment. New methods and new equipment can be installed in existing Latin American plants, updating the machinery and upgrading the product with minimum investment and risk. This technique should be especially popular with our smaller manufacturers, whose scale of operations is more in tune with the consumption levels of Latin America. And U.S. machinery and equipment made obsolete by our rising production standards may be transplanted in increasing volume to Latin America. These lower-output units are adequate for the lower production needs of Latin America and involve a smaller capital investment in many cases, thus preserving vital dollar exchange. And the "pay as you use" plan offered under lease or license agreements may become the popular solution for Latin American companies eager to expand but lacking liquid capital, and for Latin

American governments eager to promote industrial expansion but worried about their exchange reserves position. For U.S. companies this technique provides a light capital risk, preserves profit factors, and establishes a test period during which both principals can work out their problems and decide the future pattern of relationship.

- Use of atomic energy to provide light and power may radically alter the population distribution of Latin America and open up new vast areas for economic cultivation. Men will no longer be pinned down to areas in which "natural" sources of power exist. Population clusters presently dot the coastlines, especially in South America. Lying between are millions of acres, as yet uninhabited, which contain tremendous potentials in natural resources. These will have to be explored and developed to provide needed materials and jobs.

- The transportation system can be expected to show dramatic expansion and changes in years ahead. The sharpest impact of population and economic growth will be reflected in the highway and airway systems. Between 1950 and 1955 the highway network expanded to a total system of 746,177 miles. Already heavily traveled major and secondary arteries will have to be expanded to keep up with the fast-increasing number of vehicles in use. In 1955, passenger car registration totaled 1,624,590 (up 73 per cent in five years). There were 1,086,928 trucks and 102,654 buses. (Combined, these showed a five-year

increase of 66 per cent.) The trend toward establishing assembly plants in the key Latin American countries gives promise of a sharp upward curve in future statistics on this element of transportation.

- The airlines of Latin America are busy carrying increasing payloads of passengers and cargo and are pushing plans for more frequent schedules and faster and larger carriers. Air cargo has steadily increased (13 per cent in four years) to a volume of 205 million ton-kilometers in 1955. During this period, passenger kilometers flown have jumped 46 per cent to the substantial volume of 4.8 billion. And these statistics cover only ten countries. The vast reaches of Latin America and the contours of the land make airlines the ideal avenues of transportation. Costs are a factor, but the increasing volume of traffic and improved equipment will contribute to efficiency. It is unfortunate that past experiments with lighter-than-air carriers like the dirigible proved disappointing. Actually this kind of vehicle, carrying heavy payloads economically, would ideally serve its transportation requirements.

- On-the-job training given to hundreds of thousands of Latin America employees of U.S. branches is developing a great pool of skilled and semi-skilled labor, out of which the future foremen, supervisors, and managers will come. Their exposure to modern management methods should develop an efficient managerial class competent to help build a stronger Latin America. —A.O.S.



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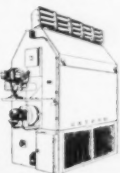
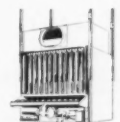
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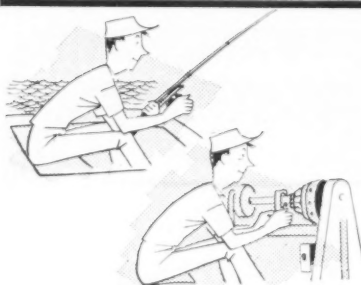
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- a successful organization that needs major amounts of capital for expansion on which returns may not be realized for several years or more;
- a concern with a good earnings record to date, but with attractive potentials that can be tapped only with a greater capital investment than can be provided through normal channels.

If the business lacks capable management, or if there are no successors for the present executive team, selling out to a well-managed company may provide the best answer. Smaller and privately held businesses may have special difficulty in providing themselves with continuing management. Sometimes a dynamic founder dominates to the point of driving away or stunting the growth of otherwise promising management timber. The heavy dividend requirements of private owners may soak up funds needed for hiring and developing a new generation of management. Sons of owners may be uninterested, or incapable of providing the right kind of management.

If a man is no longer realizing his original personal satisfaction in owning a business or if he is no longer able to direct the business as he once could, both he and the company may be better off if he sells. He can devote himself to more satisfying pursuits, or retire; and the company can profit by the direction of a new owner with an aggressive and constructive expansion program.

Selling By "Split-Off"

Often pieces of businesses are sold separately. This is what is commonly known as a "split-off," and is usually an effort to strengthen a basic business by pruning off a diseased or unwanted member.

The volume of split-offs has sharply increased in recent years and will continue to grow. The postwar merger wave produced many ill-advised acquisitions that cannot be successfully integrated. Professional management in many companies believes in stern measures for unprofitable operations and laggard divisions that cannot keep up with the pace of corporate sales growth and profitability. Intensified competition is put-

ting greater pressure on all managements to rid their businesses of ailing parts that cannot be revived.

These forces are overcoming the strong stigma that once attached to what can be a sound business move. If new divisional management, additional investment, consolidation with other divisions, acquisitions, and other means of shoring up the division are unsuccessful or inappropriate, a split-off is coming to be regarded as a perfectly acceptable alternative.

When a split-off is advisable and properly planned, it means a transfer of the infirm or unwanted operation to an owner better able to use it productively. It means, too, a greater return of capital than could be realized through other courses of action, as well as minimum dislocation and loss to executives, employees, suppliers and customers of the division. Finally, it means less embarrassment to the parent company than a costly liquidation or a meat-ax consolidation.

Take the case of a substantial, rapidly growing Midwestern machinery manufacturer. This company's rotating electrical equipment division, originally intended to be an important source of its electrical equipment requirements, proved to be too small to exist in a fiercely competitive outside market. With the company's purchases from the division unavoidably declining, and with other divisions' rapid growth calling for increased capital investments, drastic action was required. When a major rebuilding of the electrical equipment operation proved to be too long and expensive a process to satisfy the company's high profit standards, the division had to be liquidated or sold.

The company in this instance wisely chose to sell. Only two potential buyers were approached, both of whom needed the operation and could have built one like it only with a major capital investment. The second buyer approached purchased the division. Thus he acquired not only needed equipment, but inventory, customer relationships, engineering talent, new and established products, an accepted trade name, a quantity of valuable designs, and other assets at a fraction of the amount it would

have cost him to create such assets from scratch. The seller not only solved his basic problem but realized a greater return than was possible from liquidation and insured continuing employment for the maximum number of divisional employees.

Other examples of split-offs include: the sale by Fairchild Camera and Instrument Corp. of its industries division to McGraw-Edison Company; the sale by Bigelow-Sanford Carpet Company, Inc., of its reinforced plastics operations to a company headed by the former general manager of those operations; the sale by Standard Oil Company (New Jersey) of its Daggett & Ramsdell cosmetic division to a private investment group; the sale by Drackett of its isolated soy protein business to Archer-Daniels-Midland Company; and the sale of more than 250 American News Company branch offices, warehouses, and other physical assets to independent magazine wholesalers.

When an owner feels that there are good reasons for selling out, a soundly conceived plan helps avoid the hazards of the corporate marketplace. Experience indicates that such a plan is best developed in three stages: (1) reviewing the goals to test the soundness of the reasons for selling, (2) consideration of all possible alternatives to selling, and (3) if a sale is the best course, careful planning of the timing, valuation, selection of buyer, approach, and relationships with all interested groups.

What Are the Goals?

A sound first step in selling a business (or buying one) is to make a completely frank appraisal of your corporate and personal goals and the degree to which they are being fulfilled. (For a discussion of corporate goals, see DR&MI, May 1957, page 37.)

If the company is a small, privately held business, do you want it to stay small and support comfortably only its owners and a few employees, or do you want it to grow? If a large, publicly held corporation, what is the type of business and what are its profit and growth and its area-coverage objectives?

If the corporate goals are being attained, what justification is there for selling out? Is there definite assurance that selling the business will produce greater value for the owner

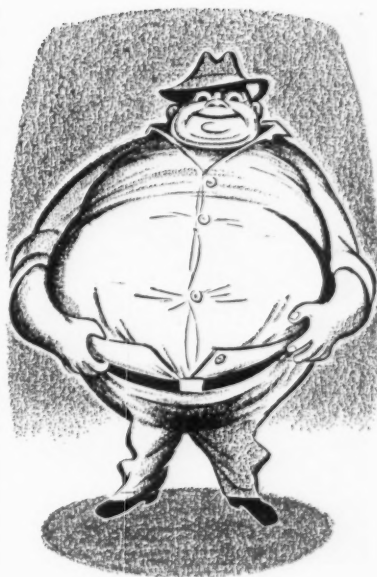
or owners than continuing to build it? Can it be established that the new owners will operate the business without substantial detriment to the long-service executives and employees who would remain with the organization? Is the character of the buyer likely to be compatible with the established character of the business and its people? Would the buyer's goals coincide with those of the owner sufficiently to permit the business to continue in its successful course? Can the owner justify any adverse effects a sale might have upon suppliers and customers whom he has encouraged to depend upon him? Is he sure that serious consideration of a sale is not being influenced by the current vogue for selling out? If the inclination to sell out is based on fear of a major depression, would his investment be any safer if held in the form of a buyer's stock or in any other securities or assets of his own selection?

Will Selling Help?

On the other hand, if the business is not fulfilling its corporate goals, can he be sure that a sale will improve his financial position? What management remedies could a buyer who is unfamiliar with the organization provide that the owner cannot supply? If an objective point of view is important in reviving the business, perhaps he should hire a new manager or call upon the services of outsiders—bankers, attorneys, public accountants, outside directors, or management consultants. If he is tempted to sell out to avoid making unpleasant decisions regarding associates or long-service employees, can he expect that they will fare as well under a new ownership that may be cruelly unsympathetic to their problems and shortcomings? Does he mistakenly look upon a sellout as a means of obscuring his own poor performance in guiding the business?

The personal goals and attainments of owners and top management should also be scrutinized when a sale of the business is proposed. Are large and immediate personal gains from a sale luring them from their responsibilities for the long-range welfare of employees, stockholders, and the public? Is a temporary desire to take it easy or a temporary difficulty obscuring long-range personal goals?

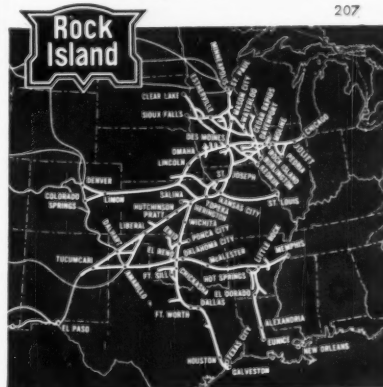
If a sale still looks attractive after



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all these questions have been answered, it's a good idea to double-check the alternatives.

One alternative is to strengthen the business from within, if necessary. Experience proves that this can frequently be done if the job is begun in time and with determination. When there is a potential shortage of top management talent, honest recognition of the problem can open the way to development of inside talent or the acquisition of outside talent. Many owners who reluctantly sell their businesses have refused even to consider this possibility. Yet the development of management talent can be one of the most challenging experiences in business.

Obtaining Money

A second alternative is to seek other sources of needed capital. In addition to commercial banks, commercial factors, and commercial finance companies, there are other sources of debt or equity financing.

For smaller businesses and certain defense contractors, the Federal Government provides funds under specific conditions.

One of the most logical sources of capital is the public. Investment bankers can frequently obtain funds through a public offering of securities. They also can obtain debt and equity financing through private placements. In most large cities there are small groups of private investors who are actively interested in worthwhile investments. They do not necessarily require control of businesses in which they invest, and under some conditions do not even require voting common stock.

Sale-and-leaseback of land and buildings is frequently used to obtain funds, sometimes when other sources have reached their lending limits. Sale or retirement of other earning assets and their replacement by leased assets can provide needed capital. This practice, which was first applied on a broad scale to the leasing of fleets of cars and trucks, can now be used for almost all major equipment.

If an owner is faced with an estate-settling problem, there are a variety of alternatives to outright sale of his business.

One of them is to set up buy-sell agreements among controlling stockholders. Such an arrangement can provide cash for the estate of a de-

ceased owner and keep control of the company in the hands of the surviving owners and their families. Well-planned trust or life insurance programs can also greatly ease estate problems.

The public sale of a minor portion of controlling stockholders' shares may provide both a market for the company's stock and cash for estate taxes. Or the corporation could offer its unissued or treasury stock, which would help to establish a market for the stock and provide additional funds. In some instances, this may be done after the common is split into voting and non-voting classes; then the family retains the voting stock and sells the non-voting common.

Selling stock to a new minority shareholder acceptable to the original controlling stockholders may provide sufficient money for estate taxes without upsetting the control or management of the enterprise. Purchase of a portion of issued or unissued stock by executives and employees, perhaps on a liberal pay-as-you-go basis, may accomplish the same purpose.

If all other methods fail, there is always the alternative of liquidation. This is usually a distasteful idea to the owner of a business, but if it must be done, it is often far better that the owner do it himself than hand the responsibility over to an outsider who is a professional liquidator. The owner will normally treat his own people better than would a stranger whose profits depend partially on how quickly and deeply he cuts the payroll.

Developing the Sale Strategy

When selling the business proves to be the best course, the five things to plan for are: (1) the timing of the sale; (2) the price range and terms acceptable; (3) the type of buyer to seek; (4) the approach to that buyer; and (5) the owner's relations with his employees, and others, during the course of the sale.

The timing of the sale can be varied by as much as five years or more. With planned flexibility in timing, the seller is poised to take advantage of any fortuitously high offers and especially attractive purchasers, as well as to pick the probable peaks of company and economic prosperity.

A seller may do himself and his

company real harm if he makes high price his overriding concern. It is a serious mistake to commit oneself to sell to the highest bidder, even though the timing may be bad.

The most generally satisfactory approach to pricing is to set a trading range. At the top is the highest asking price, which should not be so unreasonable as to repel attractive buyers. At the bottom is the lowest



THE AUTHOR • Edward R. Bagley, now a senior associate of the management consulting firm of Cresap, McCormick and Paget in New York City, has been assistant to the vice president in charge of merchandising at Mc-

Kesson & Robbins, as well as a member of the faculty of The College of Commerce and Administration, Ohio State University.

A specialist in merger and diversification work, Mr. Bagley has been a key participant in acquisitions and split-offs in a wide range of industries including electrical equipment, greeting cards, plastics, cosmetics, and printing.

price the seller can conscientiously accept from the right buyer on his preferred terms.

Establishing the proper price range for a privately held business is extremely difficult, even for those most experienced in evaluating businesses. The company's own financial and operating statements, the seller will feel, substantially undervalue his property.

There are, however, a few objective guides. The seller might, for example, use any of the complicated formulas known to some public accountants, tax authorities, and others. If his organization bears any similarity to companies with publicly traded stock, he can readily compute their price-earnings ratios, market prices versus book value per share, price-dividend ratios, and return on stockholders' equity, and then compare these figures with his own to arrive at a fair value. Or he may be able to get information on recent prices and terms of sales of similar businesses.

The seller may be able to reconstruct his audited statements to show increased asset value or earning power on a basis that is likely to be acceptable to the buyer. Remember, however, that the buyer probably has looked at many such recast state-

ments before and will expect them to be based upon actual achievements, not on fond hopes for the future.

Also, it may be possible to document special values in the business that do not appear on the balance sheet by presenting research reports on new products or processes, studies of customer preferences, analyses of new markets, inventories of fully depreciated but useful assets, and the like. Finally, he may be able to show the buyer convincing evidence of higher earnings ratios or other basic advantages over competitors and alternative sellers.

The existence of a market price for the stock greatly facilitates setting a trading range for a publicly owned business. However, any of the price-setting procedures recommended above for privately owned companies can be used advantageously by publicly owned companies as well.

Since an advantageous sale often requires from several months to a year or more to complete, the seller will, of course, revise his trading range upward if there are significant improvements in his situation in the course of time. Or he may peg his price and trading to his company's net worth and net profits as of the closing date of the sale, if it is advantageous to do so and if the buyer will accept this basis. It is surprising how many sellers in a strong bargaining position fail through fear or poor planning to obtain such favorable adjustments, although the buyer might have granted them readily.

Deciding the Terms

Since terms are frequently almost as important as price, expert advice from a lawyer, a banker, an accountant, an investment banker, or other qualified counsel is a "must." If the seller's usual advisers are inexperienced in these matters, he should obtain the most expert advice he can. This should be done, as should the rest of the planning, well before he meets his first buyer.

Among the possible terms requiring careful consideration are: whether he will sell for cash or take the buyer's common stock, preferred stock, debentures, notes, mortgages or other forms of payment; whether payments will be made immediately or over a period of time; whether they should be on a fixed basis, or partially contingent on profits or other factors; whether he will sell



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only a part of the business, or less than 100 per cent of the stock; whether to sell his stock or his assets; whether to require employment contracts for himself and key associates; whether a merger or a straight sell-out is preferable; whether he will be willing to sign covenants not to compete with the buyer; whether he will insist on taking, or will accept, an active part in the management of the purchasing organization as an officer, director, or both. The name of the business after the sale is important to some sellers also.

Who Is the Right Buyer?

In choosing the type of buyer he wants, the seller should bear in mind the broad range of buyers in the market. Among them are operating companies, established financial groups, promoters, private investors (including, perhaps, his own executives and employees), and the general public (through public sale of securities).

Purchasers may have a record of constructive dealing with sellers, employees and others, or they may be merely well-dressed hatchet men. They may be truly interested in the seller's ideas for developing the business, or may wish only to control certain of his assets for their own purposes. They may be interested in realizing operating profits, or they may want only to trade up and resell the business as if it were a used car. Personally they may be compatible with the seller and his key subordinates, or they may be inherently incompatible.

The seller will be well advised to set his specifications for buyers precisely and to keep to these specifications regardless of high offering prices or high pressure, as long as he has personal feelings about his business and as long as the value of the business permits him to be selective.

Sizing up the men on the other side of the desk is especially hard when emotions are inevitably aroused by the thought of selling out. Some sellers are like the father whose daughter is far too good for any possible suitor. Others are so eager to sell they blind themselves to the most easily discernible characteristics—and faults—of the buyer. Assuming reasonable objectivity, however, the seller's own reactions to the buyer's principals can be an important meas-

ure of their worth. If his first reactions are at all favorable, he should give himself plenty of time to get acquainted with the men his company may be permanently wedded to. Even if experts can answer the technical questions in a meeting or two, he should insist on other visits to learn more about the people involved. During the get-acquainted process, bankers, business associates, stock brokers, investigators, key assistants, or others can make a discreet but searching study which may confirm or challenge his own reactions. In many cases, it is not at all necessary that the underlying reason for the investigation be known. If the seller is convinced of the value of secrecy, he can suggest an acceptable covering reason for his sudden interest in the X Company. There are few companies or groups large enough to buy a substantial business whose principals cannot be correctly sized up in advance by this two-pronged method of analysis.

Discretion Is the Key

The decision on the proper approach to potential buyers can affect greatly the speed, price, terms, and satisfaction of your sell-out. At all costs, it is important to avoid the appearance of having the business shopped around and to avoid spreading rumors of the impending deal. Circulation of such rumors can do serious damage to employee, customer, and supplier relationships. In too many instances, rumors arising from unplanned selling activities have seriously depressed the selling prices of essentially sound businesses.

Direct approaches to prospective buyers can save time and provide entrée to preferred buyers. They will save middlemen's contingent fees and can be handled very confidentially. The direct approach helps to provide a clear and immediate understanding of the buyer's situation and establishes a basis for personal handling of the transaction from the outset.

But the indirect approaches (including courting offers and simply awaiting buyers' overtures) are frequently more attractive. They may be handled by your outside directors, a commercial banker, an attorney, an accountant, other outside counsel, by business brokers, investment bankers, figures in the trade, such as executives of trade associations, trade

publications, customers, or suppliers. Advantages of an indirect approach to the seller include preservation of a somewhat stronger bargaining position, less personal embarrassment, opportunity to let mutual interest develop naturally over a period of time, and ease of sounding out a buyer without a commitment to sell.

With the foregoing principles in mind, we are ready to plan the approach. The first step is to take inventory of prospective purchasers who are both acceptable and likely to buy. The list should not be limited to acquirers who have already shown interest. It is important, too, not to let the flattery of potential offers of many thousands or millions of dollars upset judgment of their acceptability.

In inventorying likely purchasers the seller should avoid mere quick guessing about obvious possibilities, such as the competitors that he has always thought would like to absorb him. For example, preparation for the sale of the rotating electrical equipment business discussed above included a comprehensive study of the principal companies in several fields—major electric equipment builders, purchasers of such equipment, and companies that currently produced certain of their own equipment for assembly into their own electrical machinery products. It was found that the third category was the most promising, and further study of that field disclosed that several small- and medium-sized companies should be approached first. It was also learned, through sources acquainted with these prospective buyers, that their principals were both honorable and discreet. Thus there was minimum danger of disclosure and damaging rumors of the forthcoming sale.

How do you make an approach? Whether you go to purchasers directly or indirectly, a way must be found to preserve your bargaining position, to avoid at all costs the attitude of a suppliant or desperate owner. If yours is a much sought-after company, as are many in the drug, chemical, oil, and other fields, a hint that you may be considering an offer will bring buyers to your door. For the majority of less favored businesses, purchasers should be made to realize (whenever it is true) that the seller is under no immediate pressure and is simply weighing possible offers before making major decisions on plant expansion or entering new

markets. Less dynamic businesses with below-average earning power should diplomatically post buyers on alternatives to a disadvantageous sell-out. While each approach is highly individual, negotiations should always be begun on an exploratory basis with no obligations on either side, and the sale should always be started properly by putting the seller in the strongest possible position.

How many companies do you approach? If your business, asking price, and terms are at all attractive relative to the market for companies in your situation, an approach to one, two, three, or four hand-picked prospects will usually provide a good buyer. Unless the seller is completely unreasonable in his demands, there is rarely any excuse for the promiscuous shopping of businesses by sellers or their agents that is so prevalent in today's market.

One of the most ticklish questions is how to back out gracefully after a rebuff or if you do not wish to pursue negotiations after you've become acquainted with a buyer's principals. Ideally, you should have a good bargaining position and a no-obligations tone in your approach which would permit you to break off such contacts by stressing gently any impersonal points of apparently conflicting interests—for example, excessive duplications of personnel or facilities. If this is done diplomatically, there is a perfectly acceptable basis on which either party can justify the break.

Announcing the Sale

Approaches, negotiations, even life-long friendships have been imperiled by failure to plan relations with all concerned with the sale of the business. When it becomes certain that a sale will shortly be concluded, a detailed plan for joint public announcement and prior internal announcement to your employees is imperative. Usually the latter must be made by the owner or top manager personally. His people deserve to hear such important news in advance from him, and he cannot afford to have them learn from newspaper stories or other outside sources.

In today's bull market for companies it takes time and care to sell a business advantageously, but a planned program wisely followed will greatly increase any owner's chances of selling out to the right buyer at the right terms and price. END



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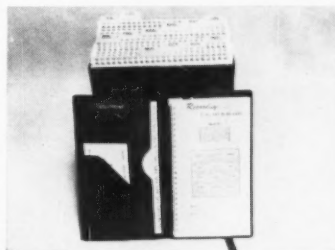
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NEW ROUTES TO THE MARKET

ALSO: Marketing know-how revealed; pastel shades push sales.

HAVE YOU TAKEN a long look at your channels of distribution lately? With competition quickening, many companies are closely examining the routes by which their goods get to market. Sometimes a new, unexpected route can lead to bigger sales.

For example, Smith-Corona, Inc., of Syracuse, N.Y., is setting an industry precedent by selling an office typewriter through nonexclusive dealers—just as portables are sold. (The usual practice has been for typewriter manufacturers to sell their office models through company-owned outlets or through a limited number of exclusive dealers.) The sales results have been much higher than anticipated and the company expects that its office typewriter volume will be boosted about 25 per cent in the year ahead as a result of this switch in marketing channels.

Another company that is getting results by veering off from traditional trade patterns is the Hussco Shoe Company of Honesdale, Pa. It claims to be the only shoe manufacturer selling entirely through exclusive dis-

tributors. It turns down large orders from department stores, chains, and other volume buyers and refers them instead to its regional distributors. Even such a big buyer as Macy's gets the Huskies brand moccasins and sport shoes through the local distributor.

In order to make this unusual system of distribution pay off, Hussco firmly insists on list-price maintenance and aids and encourages the development of distributor services to retailers. The company relies heavily on the nation's 23,000 independent shoe dealers, who in turn depend on the distributors for fast delivery, sales promotion, and merchandising assistance.

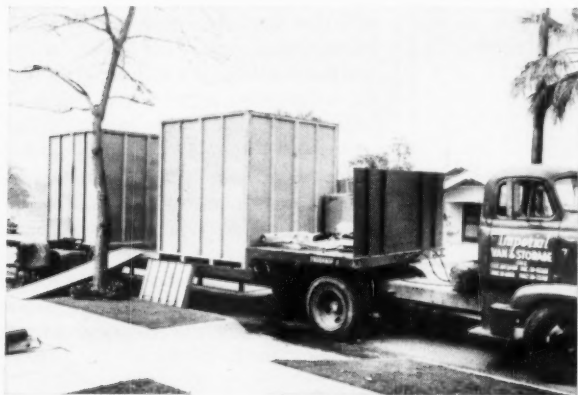
A new survey by the Folding Paper Box Association points up the manner in which manufacturers are seeking out new channels of distribution. Back in 1950, about 45 per cent of all supermarkets handled housewares, compared with 90 per cent at the present time. Supermarket sales of housewares rose from \$11 million to \$225 million during the same period. In the past four years supermarket

sales of phonograph records rose from a few thousand dollars to today's estimated \$40 million. The dollar volume of health and beauty aids moving through supermarkets almost tripled in the past five years to reach a total of \$810 million in 1956. Supermarkets now account for 20 per cent of the \$375 million hosiery business and look to double their take in the next five years.

Company shares know-how

Most companies limit their aid to education to financial contributions to specific institutions. But not the Procter & Gamble Company, Cincinnati. Two years ago, P&G's president, Neil McElroy (the new Secretary of Defense), headed up the White House Conference on Education. Now the company is starting a new program that educators hail as the first of its kind.

The plan is to supply colleges across the nation with teaching aids in the form of case histories of actual marketing situations encountered by Procter & Gamble. This will be a



Better transportation can frequently open the pathway to higher profits (see DR&MI, June 1957). For example, Imperial Van & Storage, Inc., Long Beach, Cal., reveals that it is saving \$1 per hundredweight by palletizing house goods on Fruehauf trailers.



Companies are on the lookout for new ways to trim time and accommodate customers. Franklin Supply Company, Chicago equipment distributor, reports that with a helicopter a salesman makes as many calls in an afternoon as he did before in two days.

Coming next month in

DUN'S REVIEW and Modern Industry

THE AMERICAN OFFICE— TODAY AND TOMORROW

This multi-part Extra Emphasis Feature will describe the sweeping changes that have been taking place in the American office. Our editors will focus on office layout, design, furnishings and equipment, and other environmental features that enable the office to function smoothly as the company nerve-center. A detailed survey of several hundred companies will show what is being done to cut costs and improve office operations. In the October issue you'll find the answers to such questions as:

- Just how far has office automation penetrated business?
- How large are the clerical workforces in various kinds of companies?
- How well are most offices equipped to meet quickening competition?
- What specific changes are companies planning in their offices in the next few years?
- When do companies replace various kinds of equipment?
- How can you stem the flood of paperwork in your office?
- What new things are companies doing to recruit clerical workers?
- What does it cost to staff your offices?
- What does it cost to provide an office worker with a place to work?
- What are the errors you should watch out for in planning the layout of your new or remodeled offices?

continuing program, and new case histories, prepared by a panel of marketing professors, will be distributed every six months. The first two case histories are on intra-company product competition and the relationship of distribution channels to production problems.

Says Howard J. Morgens, Procter & Gamble executive vice president: "As a company, we look to the country's educational institutions for the trained employees we need for continued progress and growth. Therefore, we think it is only fitting that we do what we can to help those institutions make their training as effective as possible."

The program should also be valuable to Procter & Gamble in putting the company name and methods before undergraduates, particularly in the tight recruitment situation.

Pastel-packing mommas

Color continues to make important marketing news.

The High Standard Manufacturing Company, Hamden, Conn., thought there was a good market among housewives for pistols for home protection. For several months the company searched in vain for the proper sales appeal. Finally, the sales vice-president came up with an idea that solved the problem: produce the pistols in pastel shades to appeal to the feminine market. Orders for the guns, introduced in July, are now several hundred per cent above the anticipated level.

Pastel shades are also increasingly important in selling kitchen ranges, according to Geo. D. Roper Corporation, Rockford, Ill. While white is still the favorite, pink, green, and yellow have come into favor in the last year or two. Last year pink was the most popular of these, but now yellow has taken the lead. Use of color in appliances gives an added boost to the market, for housewives have a new incentive for trading in their old models when their kitchens are repainted.

Even some prosaic products are becoming more colorful: One manufacturer has announced a new orange carbon paper.

Customers get together

America is a nation of joiners. Fraternities range from alpha to omega,

birdwatchers have their own coteries, and now even Mickey Mouse heads his own club. One of the newest voluntary organizations is one of the most provocative yet to appear. It is an association of one manufacturer's customers.

The Alwac Users Association recently held its own organizing meeting in Washington, D.C., to elect officers and to set up rules and by-laws for the organization. More than 40 per cent of the customers of the Alwac Corporation, Hawthorne, Cal., were present.

The aims of the association are to enable all users of Alwac computers and data processing systems to exchange information on their installations, programs, and routines, and by so doing to make best use of the products purchased from Alwac. It is an idea worthy of consideration by manufacturers of complex and intricate products.

Marketing booklets

As a rule, equipment manufacturers send along instruction manuals with purchased equipment. A. B. Dick Company, Chicago manufacturer of duplicating equipment, goes a step beyond this with a new merchandising gimmick that should stimulate the use of duplicators. It is a fact-packed, 30-page booklet on *The Care and Feeding of Ideas*—how to develop ideas, explain them, and put them into action.

It is clever merchandising, for there must be an idea behind each communication. And to produce communications people frequently use—you guessed it—duplicators. If you would like a free copy of this helpful booklet, write to A. B. Dick Company, 5700 Touhy Ave., Chicago 31.

Also just released is a new catalog of films that companies can use for training programs in marketing and sales. Prepared by the American Marketing Association, it is available for 50 cents from the AMA, 27 East Monroe St., Chicago 3.

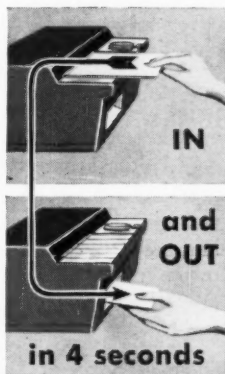
A new checklist of the points to be covered in a successful marketing program is yours for the asking. Entitled *Sales Management Planning Guide*, it can be used in launching a new product or in reviewing your present product line. The checklist is available from Altshuler Associates (marketing consultants), 6234 Scenic Ave., Los Angeles 28. —T.K.

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BUYING CONTRACT RESEARCH *continued from page 48*

posal if they don't get the contract. In fact, a proposal usually specifies that if the client rejects it, its contents are to be held confidential. Contract research executives won't even look at technical proposals submitted by competing labs who lost out.

Another aspect of this delicate problem is created by the unethical client who implements the proposal in his own laboratories after dismissing the research group. Such tactics are likely to backfire. The research organization may, in the meantime, sell the idea to a competing manufacturer, reduce it to practice, and make a patent application before the first manufacturer can act. Or if the unethical manufacturer gains a patent based on the idea in the proposal, the research group may attack the patent in court and sue for damages.

Some research organizations require that technical proposals be accepted or rejected within a stated period—usually 30 to 90 days—because they feel that an idea may lose value if it is not acted upon promptly. To avoid this problem, Armour Research Institute submits "preproposals," briefly sketching out an idea and a plan of attack to several potential clients at once. The first one who shows serious interest is given more complete information—and usually signs a contract, according to Dr. E. H. Shulz, director of research operations.

Liaison with Researchers

You must assign a man from your own company—preferably someone who is technically proficient in the area in which the research is advancing—to maintain liaison with the research organization. But liaison doesn't mean constant communication or direction. You shouldn't set the project adrift, of course, but under ordinary circumstances one contact a month is likely to be sufficient. One research director reports that one of his clients is raising the costs of a project by constantly checking on its progress. Every time the liaison man ties up the project leader with queries, the client is charged for the time involved.

If you have a significant number of outside research contracts, do not detail a single man to handle them all. Although he may become adept

at dealing with administrative details, he is likely to lose touch with your technical problems.

Liaison meetings will help to teach your own people how hired researchers think and how they organize their work. As a means of improving understanding, Martin Goland of Southwest Research, recommends that the meetings be held alternately at your company and the outside laboratory.

If, after a certain amount of work has been done, it appears that nothing positive is going to come out of the project, the research group will usually recognize that fact quickly and suggest termination. The length of termination notice varies, but by far the most common figure is 30 days. Norden Laboratories, White Plains, N.Y., the research division of Norden-Ketay, will stop on only a few hours' notice, according to George Butler, sales manager. Mellon Institute asks for 60 days.

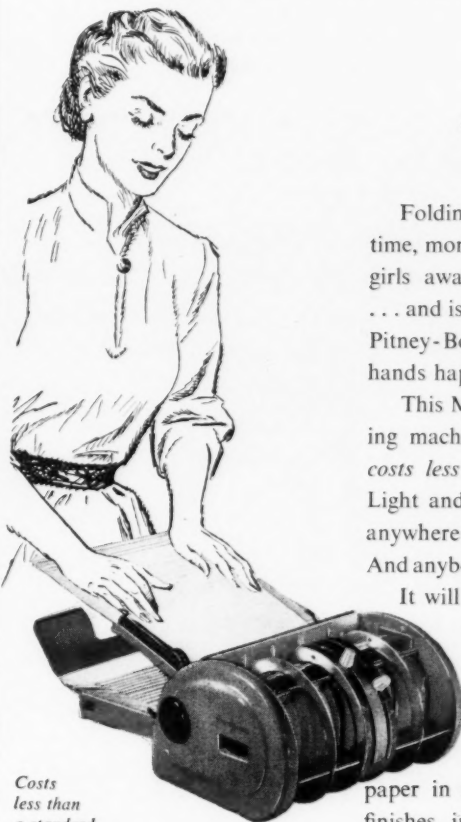
The Question of Secrecy

All the standard contracts used by research organizations contain provisions guaranteeing secrecy to clients. Not only can you keep the results secret, you can even hide the fact that you are supporting a project. Normally, however, researchers like to publish the results of their investigations in appropriate scientific and technical journals. In fact, one way in which research organizations compensate their professionals is by encouraging them to publish the results of their work. If you prefer that the results of your study be kept secret until you have gained the maximum competitive advantages, the research organization may ask you to allow some part of the project—for example, new measuring techniques—to be revealed.

On the other hand, if you want to publicize the results, you will find yourself limited by all sorts of contractual restraints. None of the non-profit foundations will allow its name to be used in client advertisements, and the commercial laboratories insist on prior approval of any advertisement in which their names appear.

All the commercial laboratories and most of the nonprofit foundations will cooperate with you in presenting research results at press conferences. In return, they ask your permission to list you as a client in their brochures—without revealing

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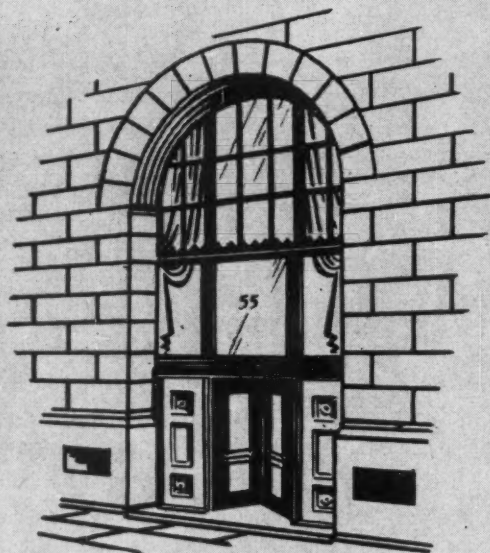
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the project's nature. All research organizations are highly security-conscious, because so much of their work is for defense.

What You Get for Your Dollar

All research projects end with the submission of a complete report (in addition to all interim reports). If the research was aimed at product or process development, you may also receive a prototype or sample. The personnel of the research group will, of course, be available to follow a product or process through the early production stages and cope with the usual bugs. Many will design any unusual product machinery that may be needed—or even the complete plant. A. D. Little, Inc., goes one step further and advises you on the marketing of the new product.

Patents that result from research projects are the property of the sponsor. He must pay all the costs of processing the patent, although he can expect help (at the usual rates) from the researchers in preparing the application. If you have your research done by the research division of a manufacturer, such as Norden-Ketay, you may also have to give free patent licenses to its manufacturing divisions.

There are a number of possible extra benefits to be gained in by dealing with an outside researcher. Potentially the most valuable are "bonus" ideas. If an outside researcher comes up with a good idea on his own or as a result of some unsponsored research, he or his organization may reveal it to a present or former client, hoping to land a contract.

Another aspect of the relationship of interest to some is the possibility of hiring a scientist or engineer who has shown outstanding talent in solving the company's research problems. Although most research groups are less than happy about the practice, some will actually encourage it under certain circumstances. Some of the commercial organizations write hiring prohibitions into their contracts, but, as a practical business matter, you can most likely hire any staff member of a research organization if you want him badly enough and if you are also a good customer. Just do the hiring openly.

Before you think of hiring a man from a contract research group, Dr. Berdick of Evans Research & Development warns, it's well to remember

that he is accustomed to a constant variety of problems. If you can't offer varied fare, you may eventually lose the man yourself.

Other fringe benefits include consultation with the research staff on problems unrelated to any work you are sponsoring and the opportunity to rent the research organization's specialized equipment.

The Competitive Situation

Contract research itself is a substantial service industry. Two-thirds of its annual gross represents Government business; the remainder, about \$100 million, represents work done for private industry. The largest part of this is performed by a dozen or so nonprofit foundations, led by Battelle Memorial Institute, the largest independent laboratory in the nation.

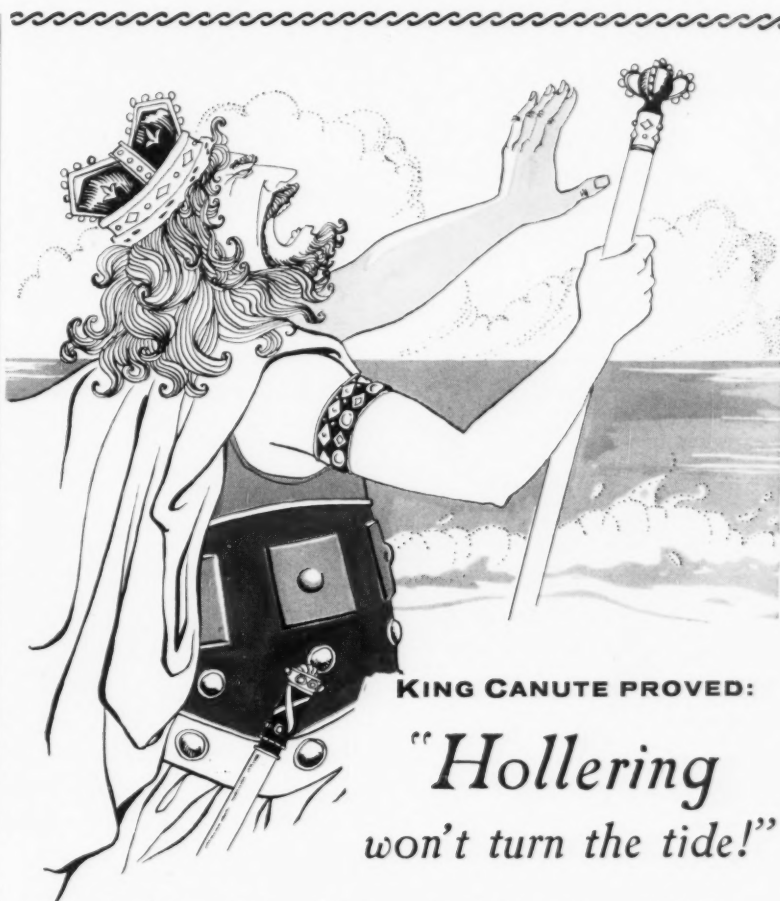
Almost every research organization would like to increase the proportion of its industrial contracts. Government work involves burdensome regulations and lesser profit opportunities, and Government accounting requirements may make extra trouble.

On a dollar basis, work done for large- and middle-sized companies accounts for the bulk of research sales. These are companies that usually have their own research staffs.

Competition among research groups appears to be on the upswing today. "Captive" labs that have hitherto concentrated on their own companies' problems are going after industrial research contracts. For example, one plant construction concern, Fluor Corporation of Whittier, Cal., has recently set up a research division that is accepting contracts on pretty much the same terms as the independent laboratories. In addition, "captive" labs are increasingly performing research as a service for customers. Obviously, companies with large research staffs have a competitive advantage if they can offer free research to customers.

College Research Divisions

The foundations and commercial labs are also getting more competition from the college research divisions. During World War II, dozens of engineering colleges set up formal research divisions, and some of the most important wartime research was performed in them. After the war, most of these universities maintained



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their research groups at the Government's request. The Government is still the universities' largest research customer (averaging 85 per cent), but their industrial load is rising steadily.

College research groups offer the customer some important advantages:

1. They can sometimes draw on the services of faculty members who are of international stature in technical fields.

2. Since one of the purposes of their research divisions is to train scientists, they are often glad to see sponsors hire staff members—especially the younger men.

3. Because they share facilities with the parent institution, they can often afford to own expensive equipment, such as nuclear reactors.

Practically all the organizations doing contract industrial research also offer other services. Most of the commercial labs do routine testing, and some will conduct market studies. Even some nonprofit foundations do one or both, in addition to sponsoring technical conferences.

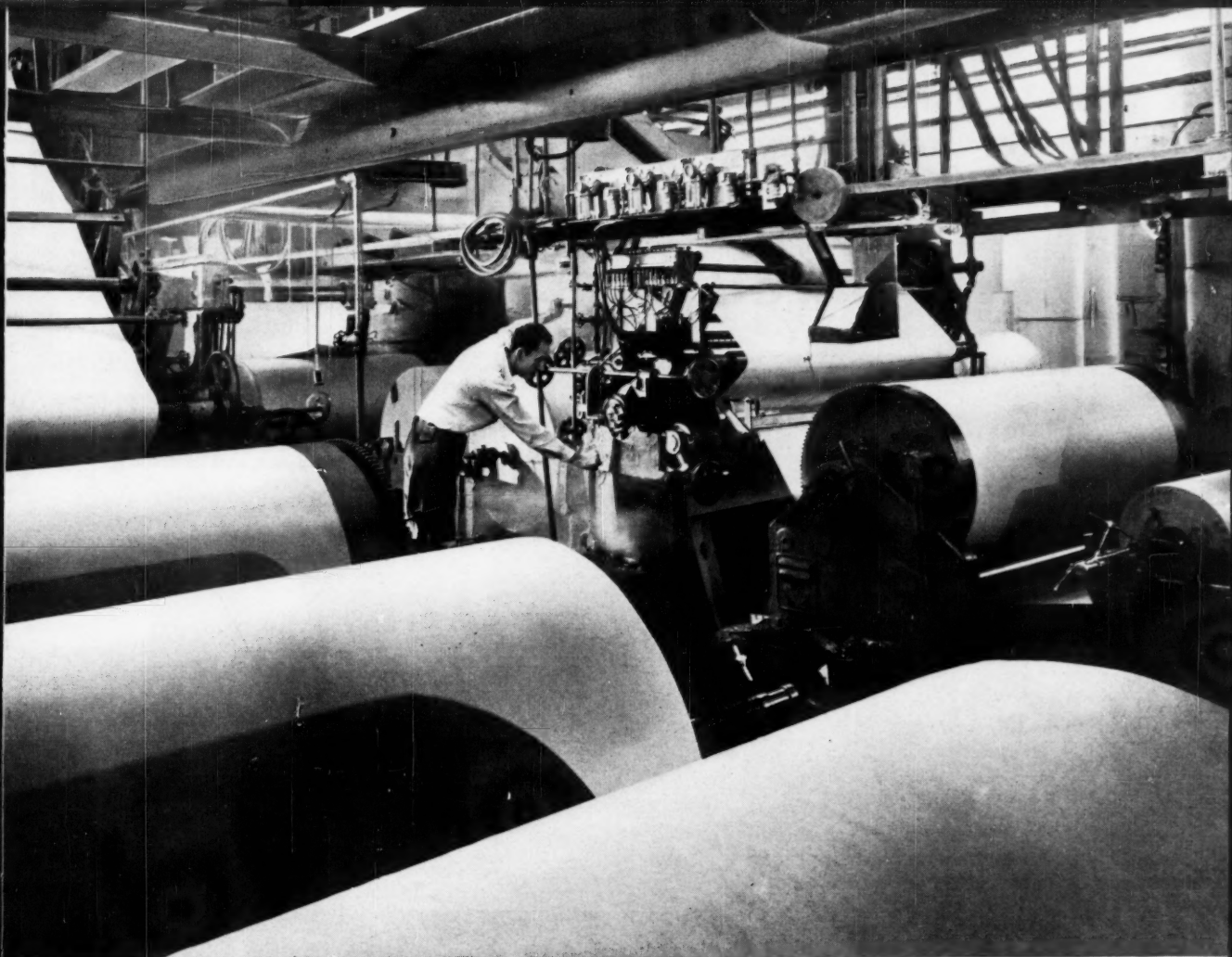
The foundations and college research divisions have a tax-favored position. The commercial labs, on the other hand, have markedly lower administrative costs, according to a National Science Foundation study. In addition, the commercial labs can offer stock options to hold on to their best people, and some operate manufacturing or patent-licensing subsidiaries.

How They Sell

Research organizations, of course, would like to sell on reputation alone without the necessity of advertising, employing salesmen, or preparing expensive technical proposals. Few, commercial or nonprofit, advertise at all. In many cases, however, they do have to go out and sell to industry by means of sales representatives (usually professionals acting as part-time salesmen). But their most potent sales technique is publicity.

Today industry is buying outside research in ever-increasing quantity, and few companies can afford not to consider this simple means of obtaining vital technology. The next time a representative of a research group knocks on your door, give him an audience. If you have the vision and capacity to use what he sells, and buy shrewdly, you may be buying a bonanza.

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Use," covers all of the applications of steam to industry. It was written by the same B&W engineers who can bring you long range sustained economy for your steam operations. We will be glad to tell you how you may obtain a copy for yourself or your engineers. Just drop us a note on your company letterhead. The Babcock & Wilcox Company, Boiler Division, Dept. DR-9, 161 East 42nd Street, New York 17, N. Y.

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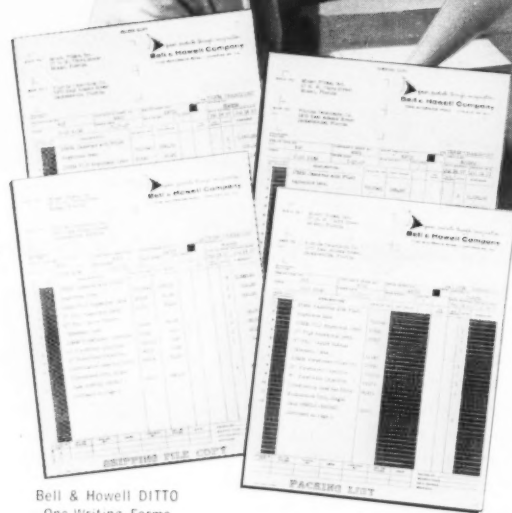


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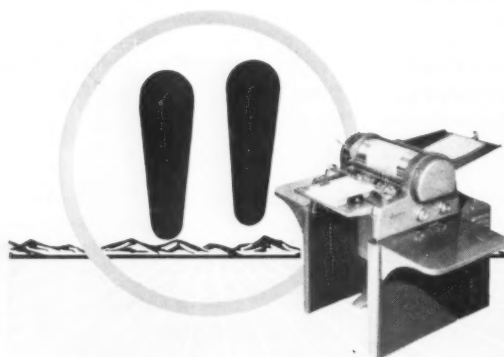
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SELECTION OF MANAGEMENT PERSONNEL edited by M. Joseph Doohar and Elizabeth Marting. American Management Association, Inc., 1515 Broadway, New York 36, 906 pages, two volumes, boxed, \$15 (\$10 to AMA members).

In recent years a sizable segment of American industry has embarked on an experiment whose results will not be known for a generation. Corporations, especially large ones, are attempting to grow leaders to order: to pick them young and insure that their development proceeds steadily along desired lines.

This two-volume work is at once a report on selection methods and a broad outline of the possibilities. Volume I surveys general trends, research findings on executive and supervisory qualifications, the variety of selection devices available. Volume II is devoted to nineteen case accounts of individual company practice in the selection and development of managers at all levels. The cases reported are from a variety of industries, and many of them are illustrated with forms used in the selection and appraisal process.

Most of the programs described have been initiated in comparatively recent years in response to the tremendous need for capable executives that grew out of the post-World War II expansion of industry. Also, the past decade has seen a recognition that promotion from within is desirable not only because it improves morale, but because the company

thus is on safer ground. One of the writers, John M. Elliott, observes: "At best, the employment of executive talent from the outside is risky; at worst, it can be disastrous to the firm's balance sheet."

No matter what a company's policy on this score is, however, the men charged with selection will find this book practical and helpful.

... and how to get picked

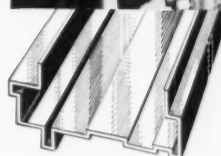
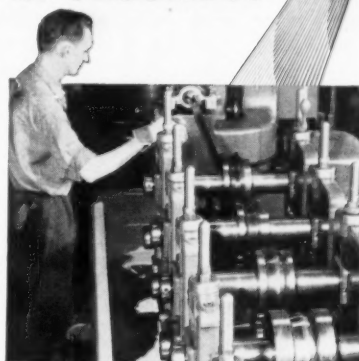
PUTTING YOURSELF OVER IN BUSINESS by Frederick Dyer, Ross Evans, and Dale Lovell. Prentice-Hall, Inc., Englewood Cliffs, N.J., 206 pages, \$4.95.

"In business," says the jacket of this book, "you have to show the people above you that you can capably handle the people below you if you want to get ahead of the people beside you"—a statement for which the AMA study reviewed above provides ample confirmation.

There have been, of course, any number of books on how to get along with people, but this one is several cuts above the average because the instruction it gives is definite and can be followed by anyone, even by a person deficient by nature in self-confidence. Instead of exhorting the reader in general terms, the authors give specific instructions on making a "presentation" to an individual or group: how to stand, where to look, how to pitch the voice, and so on. And if they don't tell him exactly *what* to say, they do provide a good many guides on how to work it out.

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light is a section at the end of the book covering dealings with foreigners, which reports on social nuances few Americans who have not lived abroad are likely to know about. For example, while North Americans and Englishmen commonly stand about three feet apart when conversing, Latin-Americans cut that distance in half, and the American who doesn't understand this is in danger of making a bad impression in his face-to-face contacts with business visitors from south of the border. Similarly, a Latin business man doesn't consider that he is late if he arrives twenty minutes after the appointed time; he feels the same way about the twenty minutes that a North American would feel about five.

For the Sales Manager

SALESMEN'S PRINTED MATERIALS AND EQUIPMENT: REPORT 2, CURRENT POLICIES AND PRACTICES IN SALES MANAGEMENT AND MARKETING TECHNIQUES, prepared by the Research Workshop of The Sales Executives Club of New York Inc., Printers' Ink Books, Pleasantville, N.Y., 64 pages (paper covers), \$15.

SALES CONTROLS, QUOTAS AND FORECASTING: REPORT 3, CURRENT POLICIES AND PRACTICES IN SALES MANAGEMENT AND MARKETING TECHNIQUES, prepared by the Research Workshop of The Sales Executives Club of New York Inc., Printers' Ink Books, Pleasantville, N.Y., 64 pages (paper covers), \$15.

These two books report on surveys of company practice. The surprising thing about the findings is the extent to which hunch and guesswork are still used in setting sales quotas and territories and in sales forecasting—and the number of companies that appear to leave their salesmen pretty much in the dark about what is expected of them.

For the salesman

THE NEW ART OF SELLING by Elmer G. Leterman. Harper & Brothers, 49 East 33rd St., New York 16, 280 pages, \$3.95.

SUCCESSFUL LOW PRESSURE SALESMANSHIP by Edward Berman. Prentice-Hall, Inc., Englewood Cliffs, N.J., 210 pages, \$4.95.

MAKING YOUR SALES PRESENTATION SELL MORE by Edward J. Hegarty. McGraw-Hill Book Company, 330 West 42nd St., New York 36, 307 pages, \$4.95.

HOW TO WIN SELF CONFIDENCE FOR SELLING by James T. Mangan. Prentice-Hall, Inc., Englewood Cliffs, N.J., 214 pages, \$4.95.

If salesmen take the first three of these books to heart, customers are in for a welcome relief from high-

pressure adjectival sales. The salesman who practices Mr. Leterman's "new art of selling" largely adopts the approach of the technological salesman—he learns all he can about the products and the customers' needs, and uses his intelligence to make the two coincide. Mr. Berman advocates somewhat the same technique, but his book places less emphasis on sources of new ideas than on the actual approach to the customer. Mr. Hegarty points out that all salesmen talk too much, and that they might achieve better results by listening and showing.

The fourth book is concerned with the salesman's approach to his job rather than his approach to the customer, and is inspirational in tone.

What will it cost?

OFFICE EQUIPMENT: BUY OR RENT? by Robert N. Anthony and Samuel Schwartz. Management Analysis Center, Inc., 275 Newbury St., Boston 16, 92 pages, \$15.

A dollar on hand today will be worth \$1.03 a year from now, assuming it is merely left in the savings bank and the interest rate does not rise. Conversely, it can be argued that the dollar that will *not* be in hand for a year is now worth only a little more than 97 cents. This, in a nutshell, is the theory of present value, which is being increasingly applied to the evaluation of capital investments. In this book, Dr. Anthony and Mr. Schwartz, both of the Harvard Business School, show how to apply the theory to the calculation of the comparative costs of leasing and renting. Included are work sheets and tables showing the effect of various interest rates on the present value of money to be received in the future.

Accounting made easy

ACCOUNTING FOR NON-ACCOUNTANTS: KEY TO AN UNDERSTANDING OF ACCOUNTING by John N. Myer. New York University Press, Washington Square, New York, 3, 235 pages, \$5.

Even the beginning textbooks on accounting are likely to be pretty hard going for the man who has had no formal training in the subject. Here at last is a book that reduces accounting to its simplest terms. It begins with simple bookkeeping entries and shows in sequence how the financial statements are developed.

Since, as the title implies, it is not

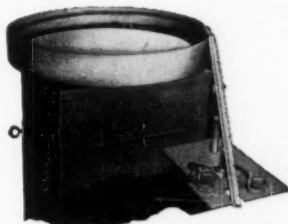
SYNTRON Electromagnetic MATERIALS HANDLING EQUIPMENT



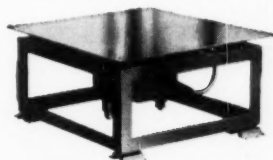
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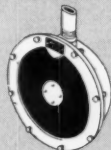
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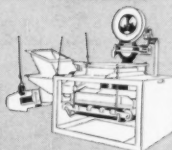
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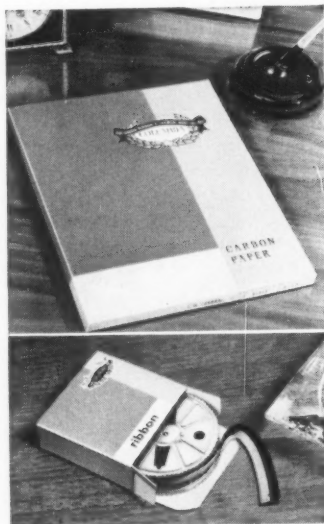
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intended to make an accountant of the reader, but only to give him some familiarity with accounting, it does not go very deeply into the more rarefied aspects of the subject. It does, however, explain briefly such matters as cost accounting, depreciation, and the various types of inventory accounting. Particularly valuable to the small business man will be a section on partnerships and the division of profit between partners.

Once having read and digested this book, the man without training in the subject will be able to understand the language and concepts of accounting fairly well, and to go on, if he wishes, to some of the regular textbooks.

In brief

TECHNIQUES OF PLANT MAINTENANCE AND ENGINEERING. *Plant Maintenance and Engineering Show, Inc.*, 341 Madison Ave., New York 17, 273 pages, \$10. Proceedings of the 1957 Plant Maintenance and Engineering Conference held in January. Includes complete text of all papers and transcripts of questions-and-answer sessions that followed.

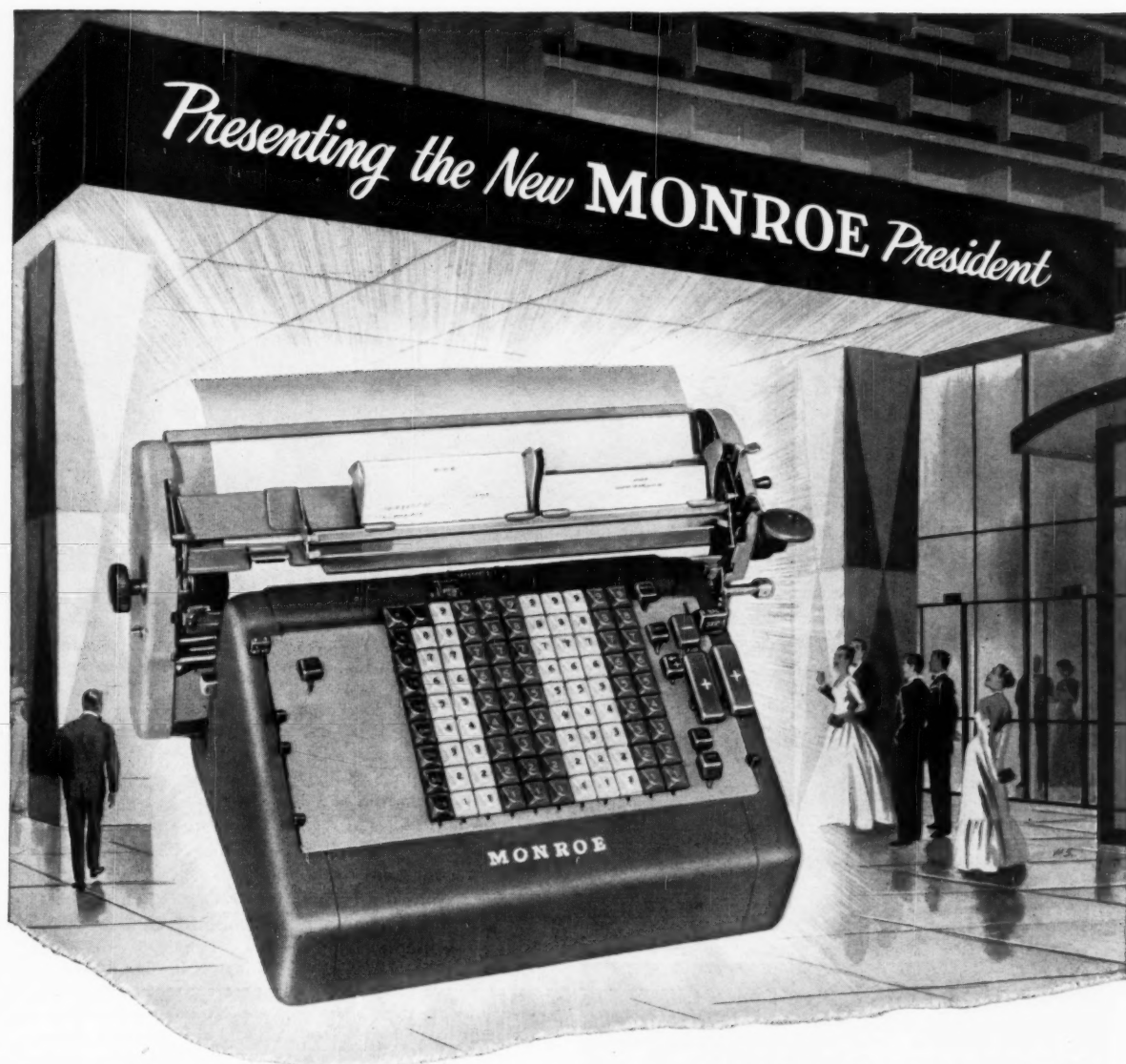
INTRODUCTION TO MODERN STATISTICS by Warner Z. Hirsch. *The Macmillan Company*, 60 Fifth Ave., New York 11, 429 pages, \$8.75. Explanation of statistical techniques in terms of the concrete business problems they are used to solve.

VENEZUELA: BUSINESS AND FINANCES by Rodolfo Luzardo. *Prentice-Hall, Inc.*, Englewood Cliffs, N.J., 167 pages, \$4.95. Non-technical report on the economy of Venezuela, with data on population, living costs, production and consumption, taxes, and most important industries.

MARKET ANALYSIS TOOLS: COUNTY BUSINESS PATTERNS. *Business and Defense Services Administration, U.S. Department of Commerce*, 40 pages (paper covers), obtainable from Government Printing Office, Washington 25, D.C., or from Department of Commerce field offices, 20 cents. Pamphlet describing how to use the data on business establishments contained in the Government's ten-volume statistical publication, *County Business Patterns*. Designed particularly as a market research aid for smaller companies.

THE DEMAND FOR ALUMINUM: A CASE STUDY IN LONG-RANGE FORECASTING by James E. Rosenzweig. *Bureau of Economic and Business Research, College of Commerce and Business Administration, University of Illinois, Urbana, Ill.*, 67 pages (paper covers), \$1. Predictions by three methods: trend projections, correlation techniques, and outlook for products.

A MANAGEMENT GUIDE TO ELECTRONIC COMPUTERS by William D. Bell. *McGraw-Hill Book Company*, 330 West 42nd St., New York 36, 403 pages, \$6.50. Simplified explanation of computers and their application to business, designed for management rather than the technician. Includes case histories of actual installations.



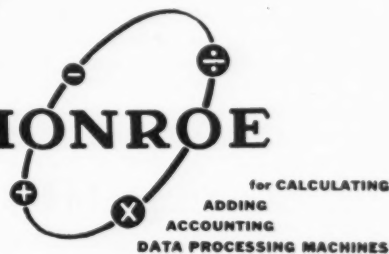
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Way up in Moses Lake, Washington, heating a hangar that houses three B-52's can pose a problem. Tail assemblies of these giant jets are extremely tall. Wing-spreads cover a wide area, too. And unless hangar doors are designed to fit these huge two-way dimensions, moving the big planes in and out through a single outsize opening normally causes plenty of costly heat loss.

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If you are responsible for any phase of recommending or supplying aviation doors or buildings, for any type of aircraft housing or production, it will pay *you* to investigate International Service. Write to the Aviation Division for further information, now.

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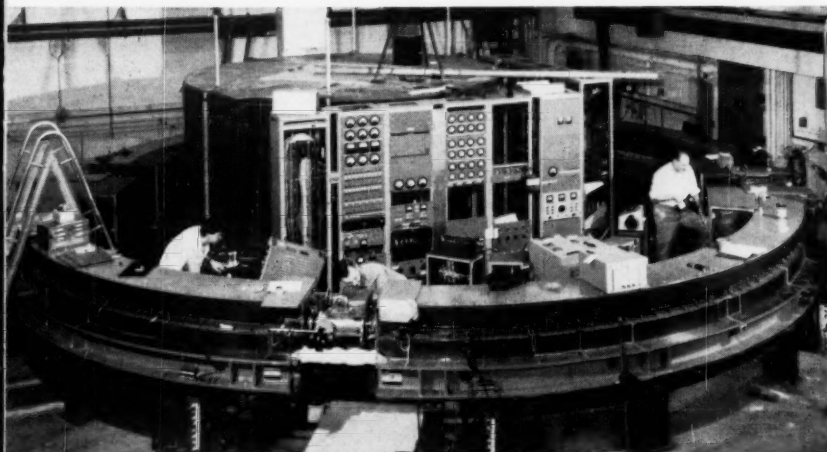
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FILMS FOR MANAGEMENT



Cornell University's atom-splitter, the synchrotron (as shown in *American Engineer*).

Marvels of engineering

A LIVELY and interesting film, *American Engineer* (29 minutes, color), offers a panoramic view of recent engineering accomplishments in the U.S. and shows how they have blueprinted America's path towards the highest standard of living in the world.

Filmed in 21 states, the movie shows well-publicized achievements like the U.S.S. *Nautilus* (first U.S. atom-powered submarine) and the offshore oil drilling rigs in the Gulf of Mexico, along with lesser-known projects like the radio telescopes that pick up ultrashort-wave radio signals from the sun and stars. Incidentally, the sounds of these signals are reproduced on the film soundtrack.

Two other highlights are an electron microscope that magnifies a molecule 100,000 times and a television-telephone demonstration.

Besides providing a broad review of completed work, the film shows some of the continuing engineering research that promises even better things in the future. This might make it particularly effective for groups wishing to stimulate enrollment in engineering schools.

Sponsored by Chevrolet Motor Division, General Motors, the film is available without cost, except for re-

turn shipping charge, from the producer, The Jam Handy Organization, 2821 E. Grand Blvd., Detroit 11.

Labor and management in arbitration

Arbitration (30 minutes, B&W) is a film record of an actual and unrehearsed arbitration session between SKF Industries and the United Steelworkers of America, Local 2898.

The immediate problem is the union's charge that overtime assignments have been improperly distributed. This gives way to examination of the more basic question: Should a company ask the union to assume responsibility for clearance of overtime assignments?

Produced by the American Management Association, the film is less colorful in subject matter than AMA's *You Are There at the Bargaining Table*, mainly because *Arbitration* deals with a more formal process and contains less human drama. Nevertheless, the film successfully documents the key problems of arbitration for both union and management.

Much of the film's value will depend upon how a particular company puts it to use. Therefore, a 33-page leader's guide is provided, con-

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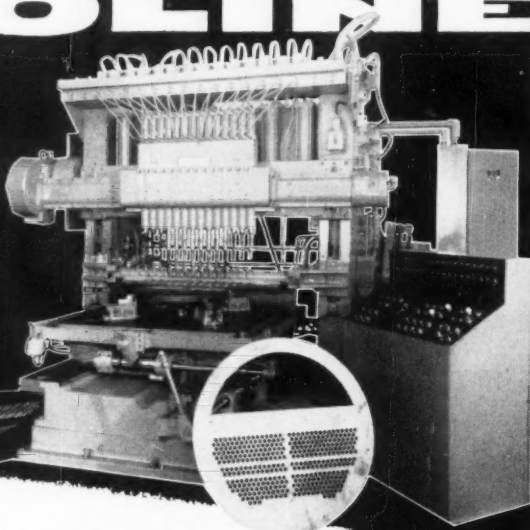
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- Special Multiple Operation Machine Tools

Over 55 years of Machine Tool Engineering experience is at your service. Tell us your particular problem.

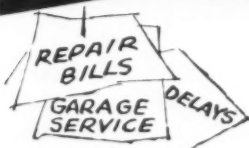
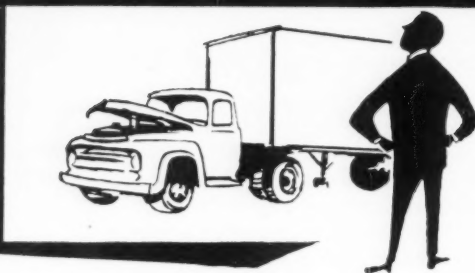


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107

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STOP TRUCK
UP-KEEP
WORRIES?**



YOU CAN ELIMINATE not only maintenance worries, but licensing, insurance and a thousand other headaches when you LEASE your trucks from an NTLS member-

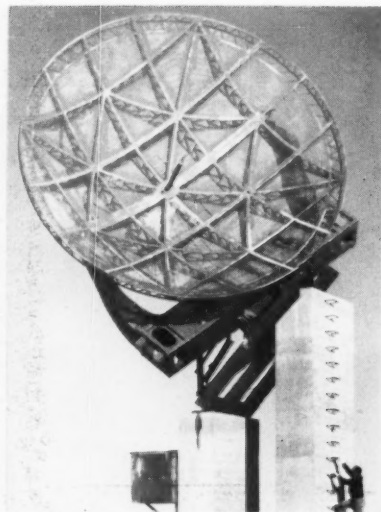
company. Trucks are engineered to your needs, always in top appearance and operating condition. Don't use your capital to add to your maintenance worries! Full-service NTLS truckleasing furnishes everything but the driver. Write for folder.



National
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SYSTEM**

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CHICAGO 4, ILLINOIS
Members in principal cities

132



Radio telescopes like this can provide much valuable information about our solar system.

taining a full script of the film plus concrete suggestions for general discussion.

Prints are available on both a sale and rental basis from the Film Library, AMA, 1515 Broadway, New York 36.

Aluminum and design: a photographic study

An apt and original use of the film medium is demonstrated in a new, titleless film produced for Alcoa by On Film, Inc.

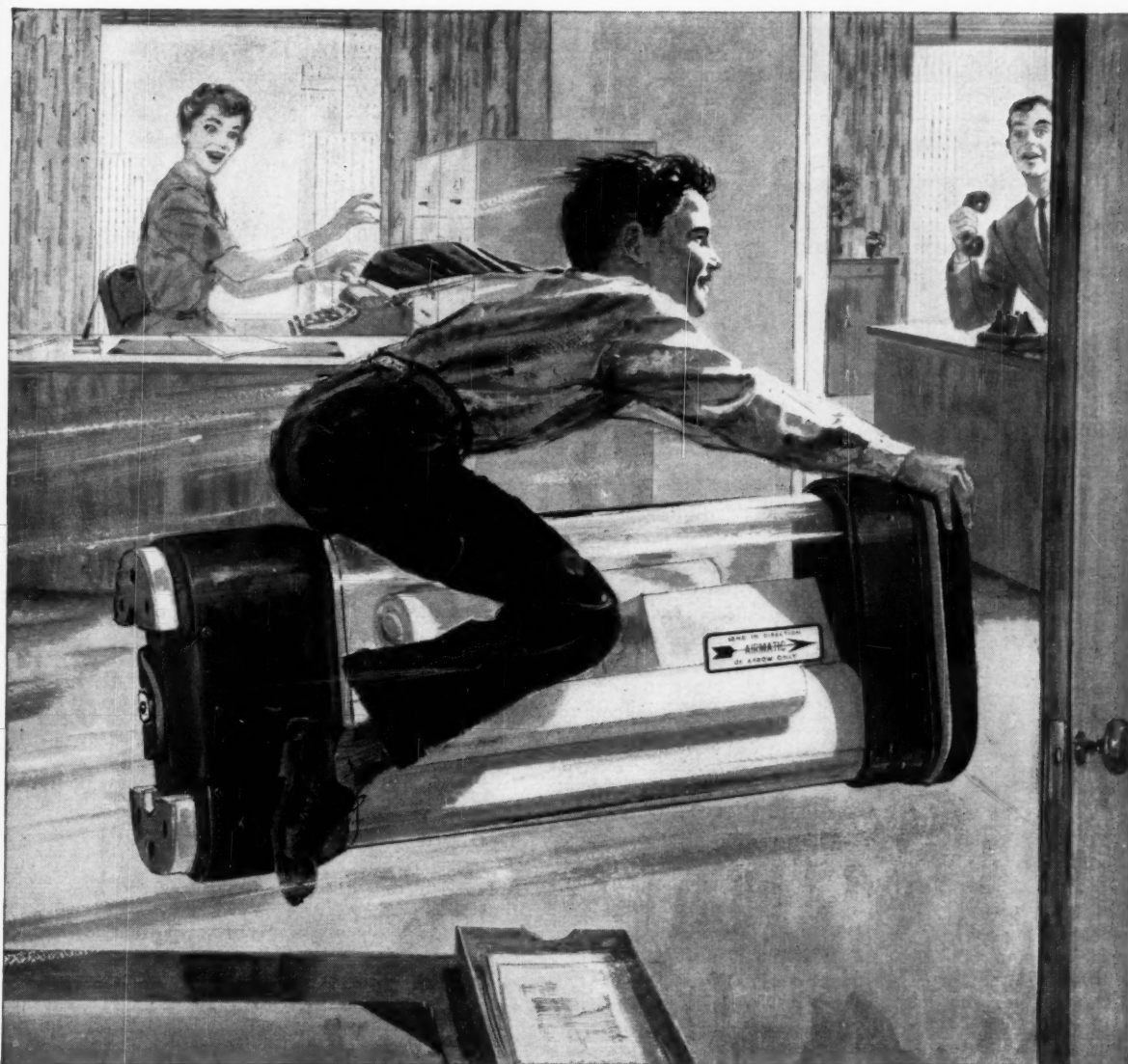
In color and with a running time of 18 minutes, the film imaginatively portrays the design, color, and textural possibilities of aluminum.

Prints are available on free loan from the Motion Picture Section, Aluminum Company of America, 1501 Alcoa Building, Pittsburgh 19.

What you gain by newspaper ads

People, Profits, and You (25 minutes, color), sponsored by the Bureau of Advertising of the American Newspaper Publishers Association, is an attempt to promote the values and advantages of newspaper advertising in today's economy. The facts presented are convincing, and they are treated with imagination.

Prints of the film, a Transfilm production, are available from the Bureau of Advertising, 485 Lexington Ave., New York 17.



This "office boy" travels 25 ft. per second

Here is a jet-propelled communication system that delivers messages and bulky paper work... sends samples, medicine, nuts and bolts... from desk to desk, office to plant—in seconds.

Airmatic Systems Corporation, an associate of International Telephone and Telegraph Corporation, has brought the magic of automatic dial telephone switching to the pneumatic tube carrier. You simply dial the destination on a standard telephone dial and the rugged, jumbo-size carrier is automatically routed to the right station.

For a bank, hospital, business or factory... the simplified "special delivery" services provided by an IT&T automatic selective pneumatic tube system will speed communication, move orders and materials faster, save miles of walking... for continuous, instant, dependable 24 hour unattended service.



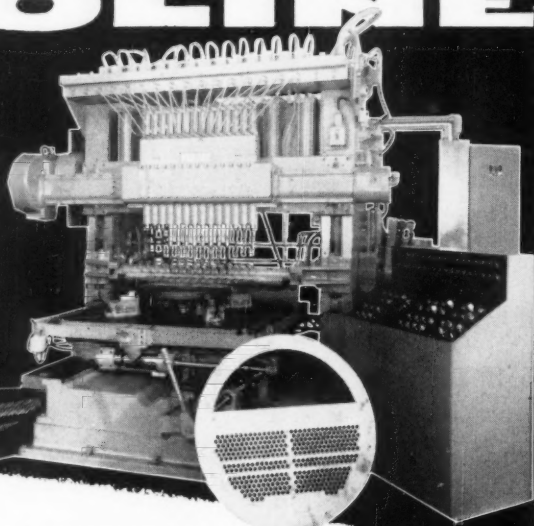
INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION, 67 Broad Street, New York, N. Y.

For information about automatic selective pneumatic tube systems write to Airmatic Systems Corporation, an associate of IT&T, Fairview, N. J.

MOLINE

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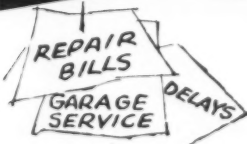


MOLINE TOOL COMPANY

100 20TH STREET • MOLINE, ILLINOIS
REPRESENTATIVES IN PRINCIPAL CITIES

107

**HOW CAN I
STOP TRUCK
UP-KEEP
WORRIES?**



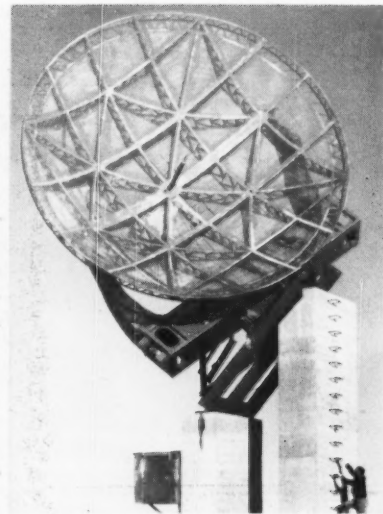
YOU CAN ELIMINATE not only maintenance worries, but licensing, insurance and a thousand other headaches when you LEASE your trucks from an NTLS member-

company. Trucks are engineered to your needs, always in top appearance and operating condition. Don't use your capital to add to your maintenance worries! Full-service NTLS truckleasing furnishes everything but the driver. Write for folder.



National TRUCK LEASING SYSTEM

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CHICAGO 4, ILLINOIS
Members in principal cities



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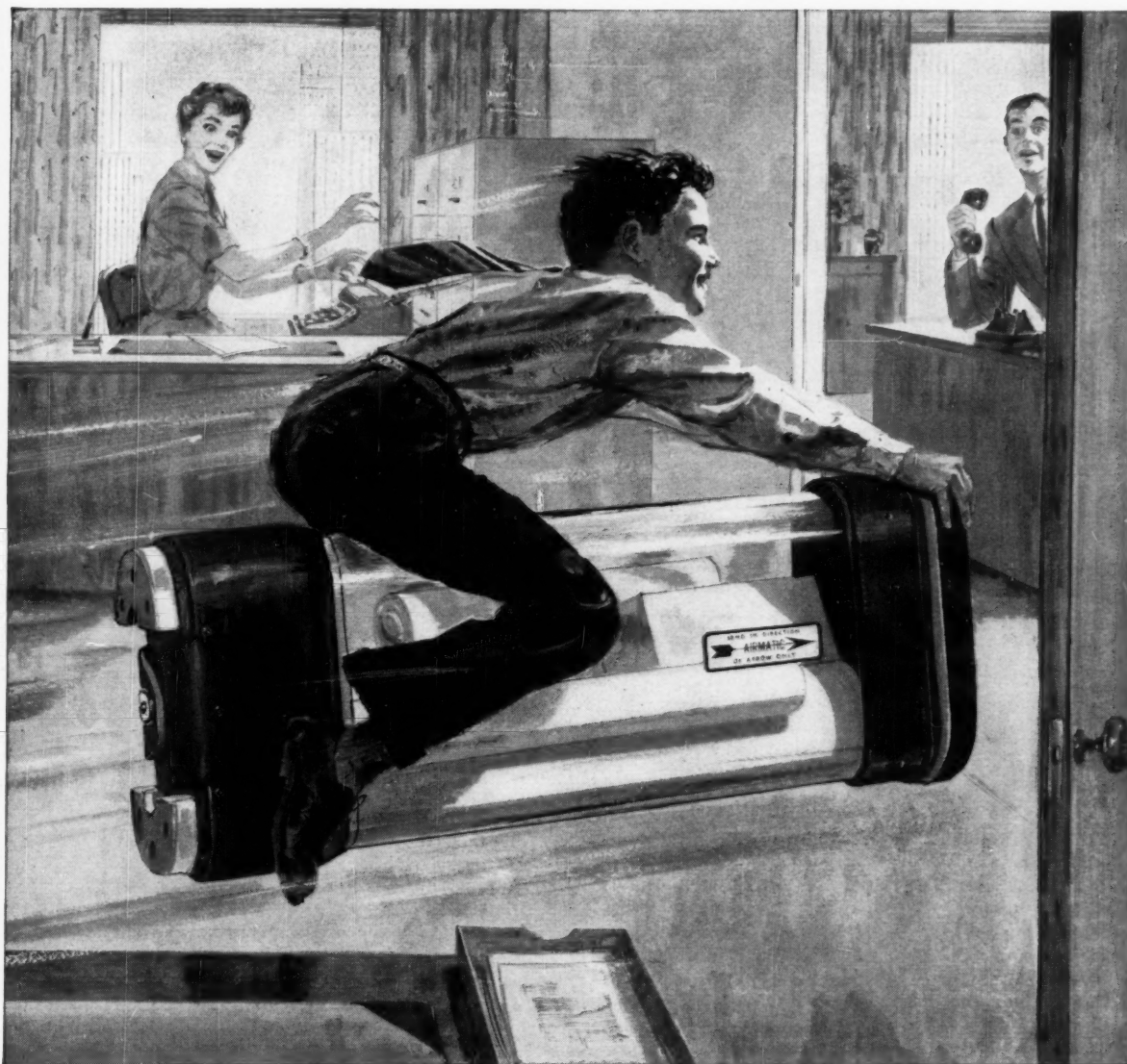
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INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION, 67 Broad Street, New York, N. Y.

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Written in simple language from the standpoint of the supervisor, this book covers, step-by-step, the duties of the line and staff supervisor in organizing, planning, and controlling production—from evaluating personnel requirements, training the new employee, and delegating responsibility, to handling job breakdowns, grievances, orders, and so forth.

Order from Book Department
Dun's Review and Modern Industry,
99 Church Street, New York 8, N.Y.

HOW TO SOUND LIKE AN EXECUTIVE

(with apologies to Frank Sullivan)

IN THIS AGE of business conferences and consultations it can be fatal, at certain moments, to find one has nothing to say. Everyone knows that the audible executive is the dependable executive; it's the silent ones who have to be watched.

Fortunately, a little practice in the use of certain well-developed management clichés will enable any executive to span the gaps in his thought with glittering bridges of words, dazzling his bosses and subordinates and confounding his rivals.

To get some professional tips on the art of executive rhetoric, DR&MI's editors have interviewed an expert in the field. As a guide to ambitious but inarticulate readers, we offer herewith a transcript of the conversation.

How do you do, sir. I'm delighted to meet you.

Glad to have you aboard, sir.

Your name?

C. Billingsley Arbuthnot. Call me "Chuck."

Occupation?

Jobwise, I'm an executive. I'm on the management team. I work with and through people.

In what way?

By getting across to them with the specifics. I communicate.

Communicate what?

Needs and goals.

What kind of needs?

The only kind that counts. Basic needs.

And what goals?

Realistic ones.

Based on?

Objective evaluation of the facts. The hard facts.

To what end?

Implementing decisions and getting results.

Decisions, eh?

Yes, sir. Sound decisions. In this business you've got to keep your feet on the ground.

That means planning, I suppose?

Lord, yes. In today's competitive market, long-range strategy is a must. I never fly by the seat of my pants except in a crisis situation.

Instead?

Instead, I project trends. In a pinch, I guesstimate. But ordinarily I wait until all the facts are in. Then, I finalize my thinking, always making allowance for the X factor.

But you do rely on backing from higher up?

I should say so. Of course, we're great believers in delegation, in this outfit. But I couldn't get anywhere without top management interest and support. It's a must.

What do you feel is the most important part of your job?

You mean the vital factor, I suppose. Well, my philosophy is you've got to have good human relations. You've got to remember that people are individuals. And the number one requirement is to take an integrated approach.

To what?

To all problem areas under discussion.

This requires?

A free two-way exchange of ideas. On?

On every company level.

How do you approach people?

In a positive way. In a friendly but firm manner.

Where do you meet them?

On their own level. I explore areas of mutual interest. I give 'em the benefit of my thinking.

How do you leave them?

With something to think about.

This is called?

Food for thought. Or motivation.

Which results in?

A dynamic organization. It pays off for the company and the employees and the stockholder. And of course for the real boss, too.

The real boss? Who's that?

Mr. and Mrs. Consumer, of course.

And your company has done pretty well on this basis, I understand.

Pretty well? I'll say we have. Why, we've grown just like Topsy. Which reminds me—I'm due at a meeting with the Old Man. You'll excuse me, I know, but I've got to run.

Well, thanks very much. I appreciate your trouble.

No trouble at all. It was my pleasure. And as long as you're not looking for a panacea, feel free to call on me at any time.

—STEPHEN JOSEPHS

HOW BUSINESS MEN LOOK AT WASHINGTON

continued from page 42

opposed, 54.6 per cent; with the rest of the men making such comments as: "Depends on commodities—Communists can't be trusted"; "United States should experiment with results obtained from relaxation of trade barriers"; and "The issue is not whether a country is Communist or not, but whether they want and demonstrate desire to live in peace with the world. If they demonstrate that desire, we should trade with them."

Of the four out of ten company presidents who favor trading with Red China and the Soviet satellites, many qualify their answers by defining what should be traded: "No important war-making materials"; "Confine generally to soft goods"; and "Excluding armaments and basic components for armament production; retain ability to use trade restrictions as weapon of diplomacy to discourage aggression." Other men, favoring freer commerce with countries in the Iron Curtain areas, volunteer such reasons as: "Only trade may bring understanding, and understanding may bring peace"; "To the extent warranted by a lessening of international tensions"; and "Not to do so means giving the markets to other nations and losing them for U.S. business."

Reasons were also given by more than half of the panelists who ruled out any trade with China "at this time" or "under present international relationships" or "until these nations establish integrity in their dealings." One man, in vetoing China or satellite trade, adds, "We may have to increase this trade due to actions of other foreign nations, such as the British and French." And another sums up his thinking in this way: "This requires an evaluation of our entire foreign policy and particularly insofar as our strategy in the Far East is concerned. On balance, I am inclined to say no."

Fission and Fusion Fears

While the trade debate loomed large, an even greater debate had flared into new prominence while the Panel was answering a far from simple yes-no check question: "Do you favor international prohibition of nuclear weapons testing?" The battle was set off in Oslo, Norway, last April 24 when, under the auspices of

the Nobel Prize Committee, Dr. Albert Schweitzer, physician, theologian, and musician, issued a "Declaration of Conscience" to the world. "I raise my voice," said Dr. Schweitzer, "together with those of others who have lately felt it their duty to act, through speaking and writing, in warning of the danger." He then documented the long-range dangers of radioactive fallout, as he saw them—principally the genetic dangers that can have no precise statistical measure for another three to six generations. In continuing the tests, Dr. Schweitzer said, "we are committing a folly in thoughtlessness." He further charged that those closest to the testing of nuclear devices hid their fears and private knowledge in the partisanship of silence.

After Dr. Schweitzer's declaration, Dr. Willard F. Libby of the U.S. Atomic Energy Commission made a rebuttal in the form of an open letter, questioning the accuracy of Dr. Schweitzer's information and outlining the present known statistical risk, which he argued was safely under the danger margin. Dr. Libby added: "I ask you to weigh this risk against what I believe would be a far greater risk . . . of not maintaining our defenses against the totalitarian forces at large in the world until such time as safeguarded disarmament may be achieved."

Other scientists, since, have supported both sides of the argument. Then, early in July, it was authoritatively reported that given more time and testing, an H-bomb 96 per cent free of radioactive fallout—the "clean bomb"—was within reach for the United States. This hardly quieted all fears or settled all the arguments. The controversy broke out anew with even greater vehemence.

Such was the climate of confusion in which the presidents gave their own opinions on the banning of future nuclear tests. In fact, half the responses came in before the "clean bomb" announcement, and half after, but this did not appear to affect the pattern or the tenor of the views. Somewhat less than half the presidents (42 per cent) do favor the international prohibition of nuclear weapons testing, against the 54 per cent favoring continued testing.

continued on page 136

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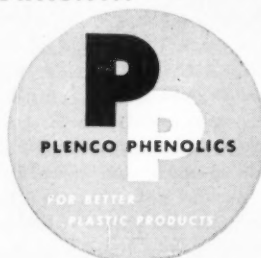
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While no specific comments were solicited, many were volunteered in support of the votes. One out of every six of the men who favor banning of nuclear weapons tests adds such comments as: "If can be enforced practically"; "With absolutely foolproof inspection"; "If positively bilateral"; "If Eisenhower proposals accepted"; and "If an effective inspection of Russian activities can be secured." Fewer of the group who favor continuing the tests volunteer their reasons. Among these one man says tests should go on "as long as whatever we have in nuclear weapons development may be a prime force in preventing war," and another says, "Nuclear testing of whatever nature will advance information on the atom of benefit to mankind."

Who for 1960?

Such are the presidents' views on America's role and some of our more significant commitments in world affairs. How does the Panel regard some of the equally vital issues on the domestic scene, the political and statutory web in which government and business are enmeshed and the interwoven political and economic shift and drift of the Republic?

Here consensus is intimately linked, more strongly in some cases than in others, to the party allegiance of the presidents. In answer to the question, "Of what political party, if any, are you a regular supporter?", more than four-fifths of the men name the Republican Party. Of these, one man adds: "Regular and traditional Republican—not 'Modern Republican.'" Another man, who says, "There is only one FREE ENTERPRISE party," presumably belongs with this group. Two presidents say they are Democrats; the remainder, less than a sixth, claim independence in varying degrees: "Independent with Republican leanings"; "Democratic locally—Republican nationally"; "Independent Republican"; "Independent—pro - Republican"; "Independent, but leaning toward Republican."

Almost nine out of ten men on the Panel answered, in some way, the question: "Whom would you like to see elected President in 1960?" And six out of ten of these men named their preferences for the next U.S. chief executive. Of the three in ten who do not nominate a specific man, most reply that it is "too early to say"; "Don't know"; or "A good Re-

publican." One man favors "a dark horse"; another, "the most honest politician"; a third, "a man with business experience." One man would like to vote, come 1960, for a "statesman who comes closest to offering the leadership and sound thinking of the late Senator Robert A. Taft." Another man reports that, at the moment, he is "wide open," and one Panel president feels that "no good candidate is now available."

But of the panelists making a write-in vote, Vice President Richard M. Nixon has a two-thirds majority. Five men link their choice of Nixon with an alternate: the Senate Minority Floor Leader, William F. Knowland (R., Calif.); Gen. Alfred M. Gruenther (now President of the American Red Cross); Earl Warren, Chief Justice of the Supreme Court; and Senator J. William Fulbright (D., Ark.). Three write-ins nominate Under Secretary of State Christian A. Herter for 1960; and two men each give their presidential vote to Senator John Sherman Cooper (R., Ky.) and Senator Harry F. Byrd (D., Va.). Single mentions are made of: Thomas E. Dewey (now in private law practice in New York City); Senator Stuart Symington (D., Mo.); Pennsylvania Governor George M. Leader (D.); former Treasury Secretary George M. Humphrey; Senator John F. Kennedy (D., Mass.); New Jersey Governor Robert B. Meyner (D.); and Michigan Governor G. Mennen Williams (D.).

More Controls Ahead

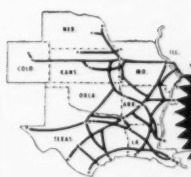
Regardless of the party in power or the political composition of Congress in the coming decades, the Panel foresees more Government regulation and control of business. Sixty-four per cent of the group, with a few qualifications, expect more legal restrictions and watchdog harassment from Washington in the generation ahead; 29 per cent feel that regulations and controls will remain about the same ("I hope"); a meager 4 per cent expect them to decrease ("I hope"); and the rest don't know, or say that the trend depends on the party in power. One president, who feels that controls will increase, says that the rise "depends entirely on labor"; and of those who feel that controls will remain unchanged, one adds "with Republican party," and another, "if no war."

continued on page 138

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One man, declining any definite prediction, writes: "An answer here is contingent upon the political action or inaction of business men. Certainly Governmental regulation will increase unless business men enter the political arena and take an active part in the democratic processes through which such issues are determined. I am confident that political awareness is growing among business men."

Beyond making their political voice heard, should business men contribute money to national and local political campaigns? Yes, say Panel members in an overwhelming twenty-to-one decision. One man adds, "Just like any citizen—no more, no less." Others explicitly say, "Corporations, no." But one president remarks sharply: "If unions can, why not business?"

While the majority of the Panel feels that dollar support of political campaigns is a foremost obligation on the part of business men, an invitation to serve in a Government post would be greeted with less enthusiasm.

More than half of the Panel feel, on balance, that they would probably turn down the offer of an assignment from Washington. As one man puts it, he would be "very, very reluctant" to leave his corporation for a Government post. Many who prefer no Government service, however, add that their decisions would depend "entirely on the position involved" or "on the seriousness of the situation at a given time." One man, now in his early sixties, says he would probably not serve "because of age." And another man, a few years short of 40, replies: "After age 50, I definitely would serve part-time, and after age 60, full-time."

But fully a quarter of the Panel would now be willing to serve the Administration part-time, if called upon to do so. And almost an even sixth would go to Washington full-time if necessary. This last was the most vocal group of all. One man says he would serve full-time if necessary, and has done so in the past, but feels that it is "doubtful that the Government will want many business men in the near future." Another man states he would serve "provided I could get my affairs in order. It is definitely a part of my program, but the timing is important."

Many make it clear that their full-time availability would depend on the circumstances of the offer. One says his decision "depends on the job"; another, "if I felt I was qualified and could make a useful contribution to the nation's welfare"; and a third, "providing confirmation for the post would not require disposal of my stock interest in the company with which I am affiliated." One man says his acceptance would "depend entirely upon the situation involved and the then attitudes of Congress toward such business appointments."

And one president, declining to say whether he would serve or not does say he would definitely not serve "if I had to conform to the present Administration's policies and support their lavish and insane giveaway programs."

Crisis and Control

In a sense, Washington faces today a crisis of prosperity. Business men, impatient to get on with expansion, are hard put to find the necessary capital. "Tight money" is blamed by some; others point to unions' wage pressures, which they feel are unrelated to any rise in productivity. And a few are critical of business pricing policies. As the value of the dollar declines and inflation moves more swiftly, the pros and cons on what the Administration can or should do about it are voiced more sharply. Sumner Slichter of Harvard, in predicting a controlled annual inflation of 2 to 3 per cent in the next decade, has said: "In this imperfect world we are often compelled to choose between evils, and if the choice is between enough unemployment to halt the rise in labor costs, direct controls of wages and prices, and creeping inflation, let us by all means have the creeping inflation. It is the least of the three evils." On another side of the argument, Secretary Humphrey, supporting the Administration's fiscal control policies, has denied that the supply of credit has been reduced. Said Humphrey: "The supply of credit has merely been prevented from expanding as rapidly as the demand therefor. . . . Faced with this choice between the inconvenience of limited credit and the robbery of inflation, our people would certainly choose the course which we have pursued for the past four years."

Some critics think that the con-

trols that have been applied are too strong; others, that they are too weak. "I gain confidence," Humphrey said, "from the fact that we are criticized with equal vigor by those who feel that credit has been restricted too severely and those who feel it has not been restricted severely enough."

While the credit and inflation issues were dominating the business headlines, the presidents on DR&MI's Panel were invited to look more broadly at the area of government controls. The question put: "Do you think it is within the ability of the Government to avert violent ups and downs in the business cycle by use of its present economic powers?"

Well over three-fourths of the men say "yes," with many stressing that controls are effective only in leveling extreme swings of the business cycle. It may be inferred that these indus-

trial leaders feel less confidence in the Government's effective control of the more moderate crises of prosperity. Phrases like "to a point" and "to some degree" qualify many of the yes responses. And one man, while agreeing that government can steady the economy with its gyroscope of fiscal controls, says it "will in fact only apply inflationary hypos as a means of buying votes." Presumably, this view applies to countermeasures against recession, rather than to the slowing down of the high inflationary tides of good times. Some men, in checking their answers, reword the statement to say that the Government could "materially lessen," "help avert," or "mitigate" violent ups and downs.

"No, but it can help," says a man in the one-sixth of the group who feel that Government controls are relatively powerless in a time of eco-

DUPONT-GM DECISION: THE PANEL'S VIEWS

On June 4, in a 4-2 decision, the Supreme Court held that Du Pont's control of 23 per cent of General Motors stock, purchased 30 years ago, is now in violation of the Clayton Antitrust Act. The full impact of this decision has yet to be felt. But in answer to the question, "What Supreme Court decision (if any) has concerned you most, and why?", more than half the Panel presidents said: Du Pont. Here are some of their comments:

"Places every corporation in uncertain position involving actions indefinitely into the past."

"Could have the effect of stunting the future growth of America."

"Places unjustified and unrealistic restrictions on the right of business to expand."

"The Court appears to be writing law instead of interpreting it."

"Legal action years ago may now be declared illegal without Congress changing law."

"Means further restrictions of free enterprise—more inflation."

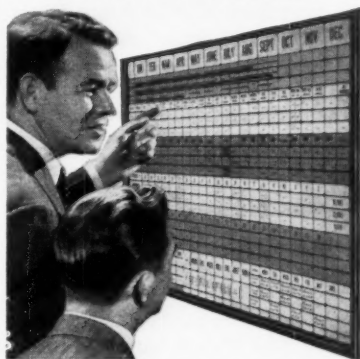
"May result in attempts to break up large successful companies."

"Unfair and unreasonable—anti-big-business."

"The decision appears to me to be a great mistake, unless intent is proved."

"The Supreme Court established a dangerous precedent by holding that a violation of Section 7 of the Clayton Act is determined by conditions existing at the time chosen by the Government in bringing the action rather than at the time of the acquisition itself. The result of this decision now exposes acquisitions after the enactment of the Clayton Act in 1914 to attack retroactively and places business in the untenable position where it has no way of determining whether an acquisition which is lawful today may be in violation of the antitrust laws tomorrow."

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conomic catastrophe. And the others, who prefer not to take a flat *yes* or *no* stand on the question, feel Washington can control the economic climate "only to a limited extent," "not completely, but with some effect," and "in part." One man responds to this question with the remark: "I believe that adding further powers would only have an adverse effect on the economy."

Taxes and Executive Incentive

Last March, William J. Casey, a lawyer specializing in tax law, wrote in DR&MI: "The 52 per cent rate on corporate income in excess of \$25,000 and the still higher rates that may apply to individuals have, to some degree, converted our economy from a profit-motivated apparatus into one substantially tax-motivated." Whether and to what extent high taxes affect incentive at the executive level has for some time been a subject of lively discussion. Some of the most penetrating investigations have shied away from figures, and some of the simpler statistical reports have ignored the subtler drives and satisfactions that keep many top men working just as hard as they ever did, regardless of the Government's bite on their compensation. Still, in one opinion survey it was found that 75 per cent of the responding executives felt that the income tax burden had lowered incentive at the executive level.

How do the top men in U.S. industry actually feel about this? The DR&MI Panel was asked: "From your own experience or observation, have Federal income taxes noticeably affected incentive at the executive level?" More than three-fourths do feel that rising taxes have diminished executive incentive; 47 per cent answer with a flat *yes*, and another 32 per cent say *in some cases*. The 21 per cent remaining feel that incentive has been untouched by taxes. Several men volunteer comments. One man, who feels that taxes have noticeably eaten into incentive, claims there is "too much executive thinking devoted to corporate and personal taxes."

The other comments come from presidents who feel that taxes have affected incentive in some cases. "Most people resent the taxes," says one man, "but are dedicated to their jobs." Another man feels that, while the tax bite does not interfere with

PRESIDENTS ON THE PANEL

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HENRY S. BEERS
Aetna Life Insurance Co.
JOHN A. HILL
Air Reduction Co., Inc.
GLEN B. MILLER
Allied Chemical & Dye Corporation
I. W. WILSON
Aluminum Company of America
KEMPTON DUNN
American Brake Shoe Co.
KENNETH C. TOWE
American Cyanamid Co.
JOHN E. BASSILEY
American Enka Corporation
JOSEPH A. GRAZIER
American Radiator & Standard Sanitary Corporation
G. S. TOMPKINS
American Viscose Corporation
HOWARD I. YOUNG
American Zinc, Lead & Smelting Co.
R. L. GRAY
Armco Steel Corporation
F. W. SPECHT
Armour and Co.
CLIFFORD J. BACKSTRAND
Armstrong Cork Co.
MCCLEURE KIRKLEY
Baldwin-Lima-Hamilton Corporation
CARL S. HALLAUER
Bausch & Lomb Optical Co.
O. A. BEECH
Beech Aircraft Corporation
CHARLES H. PERCY
Bell & Howell Co.
H. W. COMFORT
The Borden Co.
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Borg-Warner Corporation
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Bridgeport Brass Co.
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The Brunswick-Balke Collender Co.
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California Packing Corporation
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Caterpillar Tractor Co.
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The Chesapeake and Ohio Railway Co.
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Crane Co.
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"quality of work, there is less tendency to accept executive offers from competitors." A third man details his views in this way: "I do not believe executives work less hard or less conscientiously because of taxes. However, the tax drain, undoubtedly, causes less to be available for capital ventures—ventures which would help small business immeasurably and benefit the economy as a whole."

Presidents Go to Court

Throughout the United States today, the recent decisions of the Supreme Court are a topic of bitter controversy among lawyers, legislators, and business men. For, in some cases, these decisions have raised questions of legality about deeds done and pacts made in good faith more than a generation ago, and have broad implications for America's social future and business's planning for expansion.

To find out how the business leaders on the Panel feel about these matters, DR&MI asked the presidents: "What recent Supreme Court decision (if any) has concerned you most, and why?" In their own views about the Court, the presidents pull no punches. As was mentioned in the first Presidents' Panel report in July, sixteen of the 112 panelists are themselves lawyers, so that several of the opinions rendered by the Panel reflect not only the hard facts of business experience but also some sophistication in the theoretical aspects of the law.

While one in seven men prefers to pass the question by, and another one in twenty says no recent Supreme Court decision has disturbed him greatly, four-fifths of the presidents are gravely concerned by one or more of the Court's recent rulings. A clear-cut 64 per cent majority mention the Du Pont-General Motors case; 10 per cent, the Jencks-FBI decision; 9 per cent, the Watkins case; 3 per cent, the school desegregation decision; and 14 per cent, a combination of these decisions or the whole trend of the current rulings.

In the Du Pont case, the Court held that it is today illegal under the Clayton Antitrust Act for Du Pont to keep the 23 per cent of General Motors stock which it purchased 30 years ago. This decision worries the Panel presidents most. Says one Panelist, speaking for many, this judgment "abandons all precedents

An Economist Answers Some Questions About Price Trends

Why are Americans better off than ever before, even though the value of the dollar has fallen substantially?

This one is easy. Per capita income has risen even faster than prices, and the average U.S. citizen, in spite of steadily rising prices, could buy over half again more goods and services last year than in 1929, the heyday of the golden 1920's.

If wages and prices move to a new plateau and tax rates stay the same, does the same percentage of consumer income go to the Federal Government?

No, the Federal Government gets a bigger bite because of the well-known graduated scale of income tax.

Where has the greatest general increase in U.S. productivity occurred?

We can reply to this in part by reference to a study published by the National Bureau of Economic Research. In the 80 years prior to 1950, output per manhour in agriculture, mining, and manufacturing combined increased about six times; in retail and wholesale distribution, about two and one-half times. Despite modern efficiencies in distribution, it has been possible to multiply workers' output by improved machinery to an even greater degree in manufacturing.

What type of machine can substitute for the individual in "professional" work?

None, of course. We cannot imagine a machine performing a medical operation, determining a borderline fire or life risk, analyzing and passing on an application for a loan, deciding whether to ship an order, or writing a credit report. Robots cannot solve human equations.

What type of business is squeezed particularly hard by rising wage and salary levels?

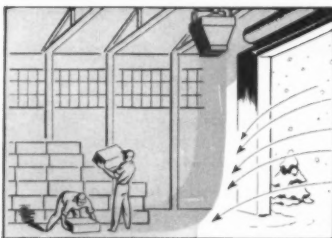
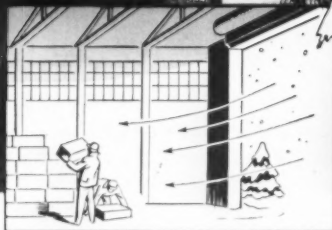
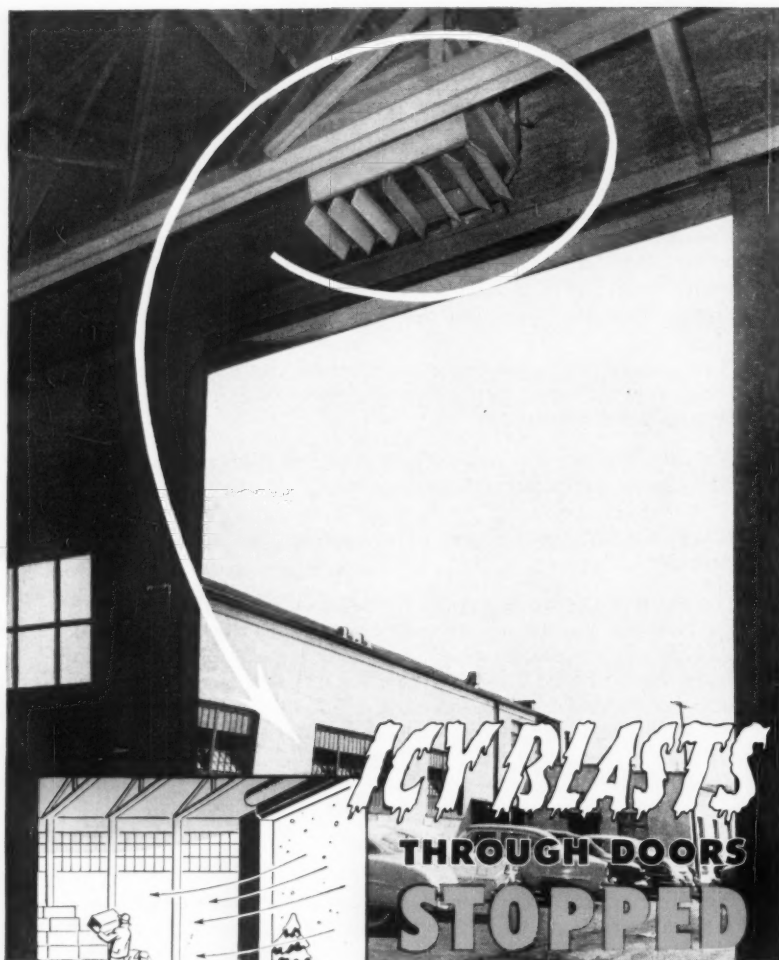
In general, the concern which (a) pays out a high proportion of its receipts for labor costs, and (b) performs a function that depends on a "professional" type of skill. The more routine an operation, the more easily it can be mechanized; the more the routine calls for individual judgment, the less opportunity to extend the worker's output by improving the tools he uses.

Of course, there is no one factor that determines prices. Many special considerations affect unit prices in almost any line of business.

How much have consumer prices gone up?

According to the Bureau of Labor Statistics, as of June 1957, the U.S. consumer had to pay more than twice as much for apparel than in 1940 and nearly two and one-half times as much for food. Transportation costs have almost doubled since 1940. Prices for personal care (haircuts, beauty shop services, and so on) have more than doubled since World War II. Residential construction costs are up even more.

—EDWIN B. GEORGE



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and makes uncertain antitrust law even more uncertain." Another man feels it has "destroyed all assurance that any previous rulings or opinions can safely be relied upon in the ordinary conduct of business." "The decision," writes a third man, "is not consistent with the facts and unfairly punishes big business on the theory that bigness is inherently bad."

Among other comments from more than half a hundred: "This could change the whole course of the present economy"; "Removes most of the certainty from an already murky field"; "Presumed legal moves years ago may now be illegal"; "Leaves in mid-air too many problems in connection with expansion through acquisition" (a lawyer president); "It seems to penalize success unjustly"; "Opens up a vast new area of business operations to improper regulation by bureaucrats" (another lawyer); "Further restraint upon business initiative and acumen" (a lawyer); and one president asks, "Where do we go from here?"

The Du Pont case, writes another lawyer president, is "a complete unwarranted intrusion into the right of private enterprise to manage its own affairs in the public interest." And one man, speaking at length for many of his peers, writes: "It is difficult to see much connection with existing law in this decision—rather, it appears to stretch the law to cover the social thinking of the Court. This, plus the retroactive feature, puts all companies who have merged or who contemplate such action in a position of uncertainty, with no rules as guideposts. It appears to be a statement that bigness is evil with not much legal precedent, but suggests that part way along the line might be all right." (For further comments, see box on page 139.)

Other Decisions

Among the other Supreme Court decisions that alarm the presidents, the most frequently mentioned are the Jencks and Watkins cases, and a few presidents make specific reference to the school desegregation ruling. Clinton E. Jencks was a union official who signed a non-Communist affidavit under the Taft-Hartley law in 1950. An El Paso jury convicted him of perjury and sentenced him to a five-year prison term. In June the High Court ordered a new trial, and ordered that the defendant be given

access to confidential FBI files. Justice Brennan, with Justices Warren, Black, Douglas, and Frankfurter concurring, wrote: "Justice requires no less."

The Watkins reversal upheld the First Amendment right of United Auto Workers organizer John Watkins, who admitted cooperation with the Communists when he testified in late April 1954 before the House Un-American Activities Committee, not to identify old associates "who to the best of my knowledge and belief have long since removed themselves from the Communist movement." Wrote Chief Justice Warren in the 6-1 decision reversing Watkins's conviction: "The mere summoning of a witness and compelling him to testify, against his will, about his beliefs, expressions, or associations is a measure of Governmental interference. And when these forced revelations concern matters that are unorthodox, unpopular, or even hateful to the general public, the reaction in the life of the witness may be disastrous. . . . Those who are identified by witnesses and thereby placed in the same glare of publicity are equally subject to public stigma, scorn, and obloquy."

Of the Jencks decision, permitting the opening of FBI files, one president says this "makes Government powerless," another says it "opens the door for more Communism," and a third says, "You can't fight Reds publicly." One president, alone of those who defend any of the Court's decisions, says: "Good—a defense of Liberty." Of the Watkins decision, some of the Panel's comments are: "Too liberal treatment of Communists"; "Too much leniency"; and "Not sound." Among the few presidents commenting on the desegregation decision, one calls it "too provocative. Effects will be damaging for years. Better remedies were available." And another says: "I do not believe we can legislate racial equality. It should be promoted by education and voluntary action over a longer period of time."

But by far the most vocal presidents, voicing objections to the High Court's recent rulings and the trend of the decisions, were those who mention more than one case or who speak in general. Writes one man: "Almost all of the recent decisions have reduced states' rights and enhanced Federal power." A lawyer

president writes: "I am concerned about most of them! Rapidly losing respect." One man, also a lawyer, reports that he is concerned with the school desegregation decision and the Du Pont case: "The first because it invades states' rights and attempts to compel tolerance which can only come by teaching; the second because it upsets established business practice." Another president succinctly sums up his views in five words: "Warren was a bad appointment."

In one of the most detailed of all the verdicts on the Court rendered by the Panel presidents, one man, incidentally also a lawyer, writes: "I have been concerned with what appears to me to be the philosophy and trend of Supreme Court decisions, rather than with any particular decision. However, particular decisions represent what I have in mind. To illustrate: The orderly structure and existence of any state and of any society depends upon a reasonable degree of certainty in all laws and customs. The Court, as represented by the school desegregation case and the Du Pont case, suddenly wipes out the structures and certainties which did exist, without the normal protective features, such as hearings, committee deliberations, floor arguments, and compromises of the legislative process. Another equally disturbing trend is the apparent elevation of the individual to a point where the state cannot properly defend itself against him, as evidenced by the recent decision under the Smith Act. Incidentally, in this case, the Court has found it impossible to follow its own decisions from one term to another." In contrast to this, one man, disturbed by none of the recent rulings, says: "Time cures most Supreme Court decisions."

Call for Action

While the majority of the Panel feels the judicial branch of the Government has gone too far in trying to do too much too fast, many presidents feel that the legislative branch could do more. In answer to the question, "What single action by the Federal Government (aside from a tax cut) would you as a business man most like to see?", the presidents want as much done as they want undone.

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almost a third of the Panel—is for the Government to balance its budget and cut expenses, to get out of competition with private business, and to do these things by “following the recommendations of the Hoover Commission.” According to the Hoover Report, it will be recalled, 47 categories of business enterprise were found being operated by the Department of Defense. These included the manufacture of clothing, paint, ice cream, and eyeglasses; furniture repair; cement mixing; tree and garden nurseries; airlines; steamships; 48 shipyards; and a railroad. The Report concluded that the total number of such activities “probably exceeds 2,500,” and that the Government’s capital investment in them “probably exceeds \$15 billion.” According to the Commission, “probably about 1,000 individual facilities could be eliminated without injury to our national defense or to any essential government function.”

In introducing the digest and analysis of the Commission’s report prepared by the Citizens Committee for the Hoover Report (May 1955), National Chairman Clarence Francis wrote: “We are learning that we can’t just hire a government, send it off about its business, and forget it. Our Constitution is not an eternal guarantee of freedom; it is simply a working franchise which must be renewed by the thought, and devotion, and good hard work of each new generation.” These are the sentiments which many of the Panel presidents shared and extended in their own comments. Urges one panelist: “Adopt the Hoover Commission’s recommendations or at least urgently support Congressional action in that direction.”

In addition to the many men who want the Government “to eliminate those functions or activities that are competitive with business,” many others argue for “greater economy in Government affairs.” “Eliminate excessive waste,” says one man. Another, speaking for many of his colleagues, wants to see a “reduction of nonmilitary spending with reduction of the national debt instead of a tax cut.” Two men argue for more statesmanship in cutting costs: one feels that Washington should “face up to inefficiencies in Government and do something about them, regardless of political consequences”; another urges the “divorcement of political consid-

ARE WE LEANING TOO HEAVILY ON DEFENSE?

Here is what some of the presidents had to say in answer to the question: *If the Western nations and the Soviet bloc should reach a sweeping (and foolproof) disarmament agreement, and the U.S. proceeded to cut defense spending and taxes drastically, what long-range effect do you think this would have . . .*

. . . on the economy?

“Highly beneficial”
 * “Would be a stimulus”
 “Temporarily upsetting; long-range effect, healthy”

“By reducing the cost of Government, and thus the tax level, it would be a great stimulus to business in the long run”

“Good over long pull after readjustments”

“Growing economy due to population growth and increased productivity”

“An economic setback which would be temporary”

* “Temporary dislocation, slightly reduced GNP, but healthy economy”

“Higher standard of living”

* “Short-run effect would be depressing, but in the long run it should be beneficial to the entire economy”

* “None—increase in peacetime needs will take up slack”

* “A temporary setback (3–6 months), then a stronger and more stable economy, with greater prosperity”

* “After an initial shakeout period, it would have a highly beneficial effect on our economy”

“Short-range effect depressing. Long-range effect extremely beneficial. Material and capital and labor now wasted on war goods would be available for private use and consumption or greater leisure or both”

“Some slowing of business expansion and of inflation”

“Beneficial, should arrest inflation”

* “Let’s go all the way with this happy hypothesis and suppose that defense spending would be reduced \$25 billion. There is no denying that this is a considerable amount. However, viewed in the perspective of a \$400-billion-plus economy, its proportion becomes less fearsome. Rather extensive adjustments would be required of some companies, perhaps even of whole industries. But certain factors would permit this adjustment to be made fairly smoothly: (1) the nature of the cutback, which would almost certainly be gradual; (2) the freeing of additional capital, now taken by taxes, for expanding facilities. The long-range result would be a healthier economy”

. . . on your company’s planning?

“Could plan with greater confidence”

“Not appreciably different from now”

“Very little effect”

“Our products package others’ products—our business would be helped”

“Little change”

“Expansion”

“Very little”

“Reduce government products division”

“Eventually more profits and expansion”

“Would require short-run adjustments which would be adjusted for the long pull”

“Will enable more concentration on peacetime products, market, and production”

“Temporary readjustment”

“If it benefits our economy, it benefits our business, and we would revise our forecast accordingly”

“Conditions would be favorable for expansion”

“None”

“Not material”

“Although this company holds substantial defense contracts, the bulk of our production is commercial. Our research and product development programs have required considerable expansion in manufacturing facilities. We believe we could accomplish a smooth transition from military to commercial production in these existing facilities”

* These comments were made by Panelists whose companies are currently doing “a significant amount” of Government contract work.

erations from legislative and judicial attitudes toward business." "Develop a systematic plan for reduction in national debt," says one man, and a second proposes that Government "cut its own expenses by at least 25 per cent."

Money and Other Matters

One in ten of the Panelists favors the Government's present anti-inflation fiscal policies, despite the individual hardships worked by "tight money." Several of the presidents would like "stronger efforts to check inflation" or more "control of inflation by regulating the spiral in wages and prices." "Continue the fight"; "Stop inflation"; "Stabilize the cost of living," say others. One man feels that Capitol Hill should "study modernization and possible unification of the monetary credit system of the country." Another urges: "Stabilize the Government bond market at lower interest rates."

Among some of the Panel's miscellaneous recommendations to Washington are: "Make some check on the Supreme Court and its personnel"; "Adjust depreciation allowances to provide for realistic replacement values"; "Streamline and control the military"; "Cancel weapons system contracting"; "More state government - less national government" (voiced by half a dozen presidents); "Adopt realistic approach to the problems of agriculture"; and "Cut useless red tape in all Government areas!"

A significant tenth of the men are most dissatisfied with our current foreign policy, trade restrictions, or tariff structure. Says one of this group: "Control imports in such a way as to equalize wages." Another wants a "sound program leading to eventual freer trade," while another argues for "a constructive and gradual liberalization of our trade policy." Many men favor more "realistic tariffs and/or quotas." One man asks for "a reasonable tariff structure to protect American industries so essential to defense." Another requests "restoration of tariff and trade controls by Congress"; still another, "larger import taxes on certain products to protect our high wage." In the more general area of foreign policy, one man would like to see the United States "get tougher with Russia," and a second, simply "a stronger foreign policy."

What they discern as increasingly antagonistic Government attitudes toward business worry a lot of presidents. One would like to see "less political trust busting," another would like Washington to "stress free enterprise and private ownership of resources." One man hopes for further "clarification and definition of the antitrust and pricing laws"; another man would like to have a "clear-cut antitrust law." Another president puts his recommendation in this way: "Minimize uncertainties as to business thinking about Government interference and regulation."

But by far the greatest single serious dissatisfaction mentioned by Panelists in their critical look at matters that need more regulation and legislation, concerns what they view as Washington's reluctance squarely to face and "curb the growing power of organized labor." One in five men makes vigorous comments on this touchy area of Government responsibility.

"Require unions to publish financial reports and get rid of racketeers," says one president. "Curb the monopolistic power of labor leaders," says another. Many men feel that the Government should "apply antitrust provisions to unions." As another man states it: "Put teeth in the antitrust laws as far as labor unions are concerned." One president wants: "True common law—laws equally applicable to business and labor." Another states his view like this: "Same rules of the game for labor as for management."

The Summing Up

These criticisms need, however, to be placed in the perspective of the thinking of the Panel as a whole: seven out of ten men consider the present Administration satisfactory or superior. The comments come from men not only conscious of their freedom, but also determined to preserve it. These are men who believe, with Emerson, that "the law is only a memorandum . . . that the state must follow and not lead the character and progress of the citizen. . . . The wise know that foolish legislation is a rope of sand which perishes in the twisting." One Panel president strikes the note sounded by the majority of his colleagues in this verdict of the Administration: "Mistakes, yes; but I think over-all good has been accomplished."

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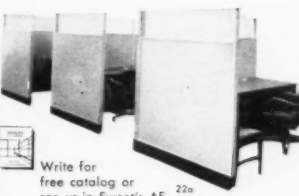


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ADVERTISING INDEX

ACCO PRODUCTS, DIVISION OF NATSER CORPORATION.....	72	INTERNATIONAL STAPLE & MACHINE CO. 63 Batz-Hodgson-Neuwoehner Advertising Agency		POTTER & JOHNSTON COMPANY, SUBSIDIARY OF PRATT & WHITNEY COMPANY, INC.....	6
ACME VISIBLE RECORDS, INC.....	94	INTERNATIONAL STEEL COMPANY.....	130	Hugh H. Graham & Associates, Inc.	
E. H. Brown Advertising Agency		Keller-Crescent Co.		PRESSED STEEL TANK COMPANY.....	19
ALLIED RESEARCH PRODUCTS, INC.....	92	INTERNATIONAL TELEPHONE & TELEGRAPH CORPORATION.....	133	The Buchen Company	
Emery Advertising Corporation		J. M. Mathes, Inc.			
AMERICAN METAL PRODUCTS COMPANY, STORAGE RACK DIVISION.....	104	IOWA DEVELOPMENT COMMISSION.....	66		
Roland G. Spedden Advertising Agency		W. D. Lyon Company, Inc.		RAINBOW ART CO., INC., THE.....	112
AMERICAN PHOTOCOPY EQUIPMENT CO.....	16A-16B			RANNEY METHOD WATER SUPPLIES, INC.....	111
Irving J. Rosenbloom & Associates, Inc.		KINNEAR MANUFACTURING CO., THE.....	56	Cye Landy Advertising Agency, Inc.	
AMERICAN TELEPHONE & TELEGRAPH COMPANY.....	Cover III	Wheeler-Kight & Gainey, Inc.		RAYMOND CORPORATION.....	65
N. W. Ayer & Son, Inc.		KLM ROYAL DUTCH AIRLINES.....	54	Taylor M. Ward, Inc.	
		Charles W. Hoyt Company, Inc.		RECORDARY COMPANY.....	113
PABCOCK & WILCOX COMPANY, THE.....	123	KORFUND CO., INC., THE.....	139	REVO-FILE DIVISION, THE MOSLER SAFE COMPANY.....	25
O. S. Tyson and Company, Inc.		Sanger-Funnell, Inc.		Stockton, West, Burkhart, Inc.	
BAKELITE COMPANY, A DIVISION OF UNION CARBIDE CORPORATION.....	74-75			REVOLVATOR COMPANY.....	84
J. M. Mathes, Inc.		LINK-BELT COMPANY.....	28	Fredericks & Company, Inc.	
BIG JOE MANUFACTURING COMPANY.....	9	Klau-Van Pietserson-Dunlap, Inc.		REYNOLDS METALS COMPANY.....	70
Reincke, Meyer & Finn, Inc.		L. O. F. GLASS FIBERS COMPANY.....	64	Clinton E. Frank, Inc.	
BORG-WARNER CORPORATION.....	34	Brooke, Smith, French & Dorrance, Inc.		REZNER MANUFACTURING CO.....	107
Rogers & Smith, Advertising		LOR-EL COMPANY.....	73	ROCK ISLAND LINES.....	109
BUNN, B. H. CO.....	78	von der Horst & Champy, Inc.		The Caples Company	
Robertson, Buckley & Co., Inc.		LORING, S. D., COMPANY, INC.....	112	ROURA IRON WORKS, INC.....	102
BURROUGHS CORPORATION.....	114			Marsteller, Rickard, Gebhardt and Reed, Inc.	
Campbell-Ewald Company		MAGLINE, INC.....	72, 80	ROYAL BANK OF CANADA, THE.....	55
BUTLER MANUFACTURING CO.....	29	Rossi and Company		Albert Frank-Guenther Law, Inc.	
Aubrey, Finlay, Marley & Hodgson		MAGNAFLUX CORPORATION.....	121	TEXTIL MCBEE CORPORATION.....	20-21
		Stoetzel & Associates, Inc.		C. J. La Roche and Company	
CAREY, E. A., COMPANY.....	113	MANIFOLD SUPPLIES COMPANY.....	108	RYERSON, JOSEPH T., & SON, INC.....	26
Grant, Schwenck & Baker, Inc.		Williams Advertising Agency, Inc.		Calkins & Holden, Inc.	
CHASE MANHATTAN BANK, THE.....	50	MANPOWER, INC.....	138		
Albert Frank-Guenther Law, Inc.		Fromstein and Levy		SERVICE CONVEYOR COMPANY.....	77
CLARK, J. L., MANUFACTURING CO.....	61	McBEE COMPANY, THE.....	35	Clark & Bobertz, Inc.	
Waldie & Briggs, Inc.		C. J. La Roche and Company, Inc.		SOO LINE RAILROAD.....	95
COLUMBIA RIBBON & CARBON MFG. CO., INC.....	128	MIAMI, FLORIDA, INDUSTRIAL DIVISION.....	108	Grubb-Cleland Co.	
E. M. Freystadt Associates, Inc.		Goettschaldt & Associates, Inc.		STANDARD OIL COMPANY, (INDIANA)...	30
COMMERCIAL CREDIT COMPANY.....	32	MICROMATIC HOME CORPORATION.....	52-53	D'Arcy Advertising Company	
Van Sant, Dugdale & Company, Inc.		Gray & Kilgore, Inc.		STEN-C-LABL, INC.....	83
COMPOTOMETER CORPORATION.....	103	MILWAUKEE DUSTLESS BRUSH COMPANY 62		Gibson-Erlander, Inc.	
Henri, Hurst & McDonald, Inc.		Al Herr Advertising Agency, Inc.		SUNSHINE PECAN COMPANY.....	138
CONSOLIDATED BUSINESS SYSTEMS, INC.....	145	MINNESOTA MINING & MANUFACTURING COMPANY.....	117	SYNTRON COMPANY.....	127
Richard-Lewis Advertising		Ruthrauff & Ryan, Inc.		Servad, Inc.	
CURTISS-WRIGHT CORPORATION.....	96	MISSOURI PACIFIC LINES.....	137		
Burke Dowling Adams, Inc.		D'Arcy Advertising Company		TEL-A-STORY, INC.....	76
CUTLER-HAMMER, INC.....	13	MOLINE TOOL COMPANY.....	132	Warren & Litzberger	
Kirkgasser-Drew		Ross Llewellyn, Inc.		TEXAS COMPANY, THE.....	Cover IV
		MONROE CALCULATING MACHINE CORPORATION.....	129	G. M. Basford Company	
DEPARTMENT OF COMMERCE, STATE OF GEORGIA.....	105	L. H. Hartman Co., Inc.		D'Arcy Advertising Company	
Tucker Wayne & Company		MONSANTO CHEMICAL COMPANY.....	8	L. E. McGivena & Co., Inc.	
DICTAPHONE CORPORATION.....	16	Gardner Advertising Company		TORONTO-DOMINION BANK, THE.....	118
Young & Rubicam, Inc.		MOORE BUSINESS FORMS, INC.....	89	Albert Frank-Guenther Law, Inc.	
DITTO, INCORPORATED.....	124	N. W. Ayer & Son, Inc.			
Henri, Hurst & McDonald, Inc.		MULTIPLE DISPLAY FIXTURE COMPANY.....	107	UDYLITE CORPORATION, THE.....	90
DRAKE, STARTZMAN, SHEAHAN AND BARCLAY.....	113	Arthur R. Mogge, Inc.		Zarker Advertising Company	
Marsteller, Rickard, Gebhardt and Reed, Inc.		MUZAK CORPORATION.....	7	UNION PACIFIC RAILROAD.....	18
DU KANE CORPORATION.....	131	Schwab and Beatty, Inc.		The Caples Company	
The John Marshall Ziv Company					
DU MONT LABORATORIES, INC., ALLEN B.....	17	NATIONAL METAL EDGE BOX CO.....	58	VICKERS, INCORPORATED.....	14
Lescarbours Advertising, Inc.		L. H. Burdett Advertising Inc.		Witte & Burden Advertising	
DUN & BRADSTREET INC., STATE EDITIONS.....	122	NATIONAL TRUCK LEASING SYSTEM.....	132	VISI-SHELF FILE, INC.....	62
		W. S. Kirkland Advertising		Ritter, Sanford & Price, Inc.	
EASTMAN KODAK COMPANY (VERIFAX), 2				VUE-FAX CORPORATION.....	94
J. Walter Thompson Company		NEENAH PAPER COMPANY.....	126	J. J. Coppo Company	
ECONOMY ENGINEERING CO.....	68, 69	Burnet-Kuhn Advertising Co.		VULCAN RUBBER PRODUCTS, INC.....	67
Kreicker & Melano, Inc.		NEW YORK CENTRAL SYSTEM.....	33	Gotham-Vladimir Advertising, Inc.	
EXECUTONE, INC.....	4	J. Walter Thompson Company			
The Joseph Katz Company		NEW YORK TERMINAL WAREHOUSE CO., 63		WAGNER ELECTRIC CORPORATION.....	95
		Bruck & Angus Advertising Agency		Arthur R. Mogge, Inc.	
FLEXROCK CO.....	76	NORFOLK & WESTERN RAILWAY.....	24	WASSELL ORGANIZATION.....	135
Walter S. Chittick Co.		Houck & Company, Inc.		James R. Flanagan Advertising	
GENERAL BINDING CORPORATION, REX-O-GRAPH DIVISION.....	84			WEBER ADDRESSING MACHINE COMPANY.....	81
Irving J. Rosenbloom & Associates, Inc.		OLIN MATHIESON CHEMICAL CORPORATION, FILM DIVISION.....	5	Stoetzel & Associates, Inc.	
GENERAL DYNAMICS CORPORATION, ELECTRO DYNAMIC DIVISION.....	86-87	O'DArcy Advertising Company		WEST BEND EQUIPMENT CORP.....	69
Gotham-Vladimir Advertising, Inc.		OXFORD FILING SUPPLY CO., INC.....	102	Morrison-Greene-Seymour, Inc.	
GILBERT PAPER COMPANY.....	Cover II	Joseph Reiss Associates		WEST DISINFECTING COMPANY.....	5
Frank C. Nahser, Inc.		OZALID DIVISION, GENERAL ANILINE & FILM CORPORATION.....	49	G. M. Basford Company	
GLICKMAN CORPORATION.....	76	Benton & Bowles, Inc.		WESTERN ELECTRIC COMPANY.....	22
Pace Advertising Agency, Inc.				Cunningham & Walsh, Inc.	
GLOBE COMPANY, THE, PRODUCTS DIVISION.....	11	PALMER-SHILE COMPANY.....	85	WESTERN UNION TELEGRAPH CO.....	3
Ross Llewellyn, Inc.		Alfred B. Caldwell, Inc.		Benton & Bowles, Inc.	
GR PRODUCTS INC.....	145	PANGBORN CORPORATION.....	60	WHEELABRATOR CORP.....	31
Norman-Naven, Inc.		VanSant, Dugdale & Co., Inc.		The Jaqua Company Advertising	
GRAPHIC SYSTEMS.....	139	PETERS-DALTON, INC.....	79	WING, L. J., MFG. CO.....	142
Diener & Dorskind, Inc.		L. J. DuMahaut		Willard G. Myers Advertising Agency	
		PHILCO CORPORATION.....	10	WIREBOUND BOX MANUFACTURERS ASSOCIATION.....	82
		Maxwell Associates, Inc.		Waldie and Briggs, Inc.	
HAMILTON MANUFACTURING CORPORATION.....	85	PHOTORAPID OF AMERICA, INC.....	12		
Caldwell, Larkin & Sidener-Van Riper, Inc.		Williams Advertising Agency, Inc.		YODER COMPANY, THE.....	125
HAMMOND, C. S., & CO., INC.....	135	PITNEY-BOWES, INC.....	23, 119	G. M. Basford Company	
Tveter, Inc.		L. E. McGivena & Co., Inc.			
HERTZ TRUCK RENTAL SYSTEM.....	91	PLASTICS ENGINEERING CO.....	136	ZIPPO MANUFACTURING COMPANY.....	88
Campbell-Ewald Company		Kuttner & Kuttner, Inc.		N. W. Ayer & Son, Inc.	
HEYER CORPORATION, THE.....	71				
Frank C. Jacob, Advertising, Inc.					
HOUGHTON, E. F., & CO.....	101				
Beaumont, Heller & Sperling, Inc.					
INDUSTRIAL MARKING EQUIPMENT COMPANY, INC., THE.....	76				
Gerald, John & Associates, Inc.					

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DUN'S REVIEW and MODERN INDUSTRY

OVERLOOKING THE OBVIOUS

HOUDINI WAS an ingenious entertainer, who took great risks in practicing his art of trickery. Behind his skill as an illusionist was a profoundly scientific mind and a keen grasp of the application of modern mechanics to intricate physical problems. Houdini matched wits with locksmiths and prison wardens, and never failed to escape within the time limit. But he almost failed on one occasion by overlooking the obvious.

The warden who nearly outwitted Houdini used a simple artifice. He placed Houdini in an "escape-proof" cell and closed the door. Houdini tried all his ingenuity on the lock but could get no action from the mechanism. A few minutes before the deadline, in desperation, he tried the knob of the ponderous door. Presto! It opened. It hadn't been locked in the first place.

Sometimes we create our own illusions. Our own most trying problems are often the results of self-deception. Too many executives are prone to assume the doors are locked against them when the difficulty is actually a mental block.

The four-minute mile was a mental block for generations of athletes, but once the barrier was broken by Bannister, the London medical student, eleven more runners disproved the myth that a four-minute mile was impossible for a human operating under his own power. Bannister used the scientific approach in training, but he also tried the obvious: He ran a little faster.

When the Japanese bombed out the Mekong

River Bridge on the Burma Road during World War II, enemy trucks still crossed on an "invisible bridge." The Japanese generals were baffled, and their strategy was frustrated. They had overlooked the obvious fact that a vast heap of gasoline cans could be rapidly converted into river barges, capable of transporting light trucks across the river.

The obvious is often overlooked in selling a difficult customer, because the difficulty is an assumption, not a reality. Many a sale has been lost because of an obstacle that never existed. A customer can say "no" a hundred times, but he need say "yes" only once. There is no one right time to ask for an order, but we overlook the obvious when we pass up any opportunity to get the nod of approval and the ink on the contract. Henry Ford was asked by an insurance agent whom he had known for many years why he never got any of Ford's business, and Ford merely stated the obvious: "You never asked me."

When envy builds a chill wall between two men in management competition, the obvious reason is often ignored. Instead, a false issue—usually some picayune personal issue—is enlarged in self-justification. Most of the time, getting along with people is the art of doing the "obvious thing," of being considerate and friendly when we could be cynical, arrogant, or just plain ornery. But the obvious is overlooked by people who always assume there is another way. Even the great Houdini spent hours finding that out.

The Editors



How to provide "branch office service" in different cities without renting space



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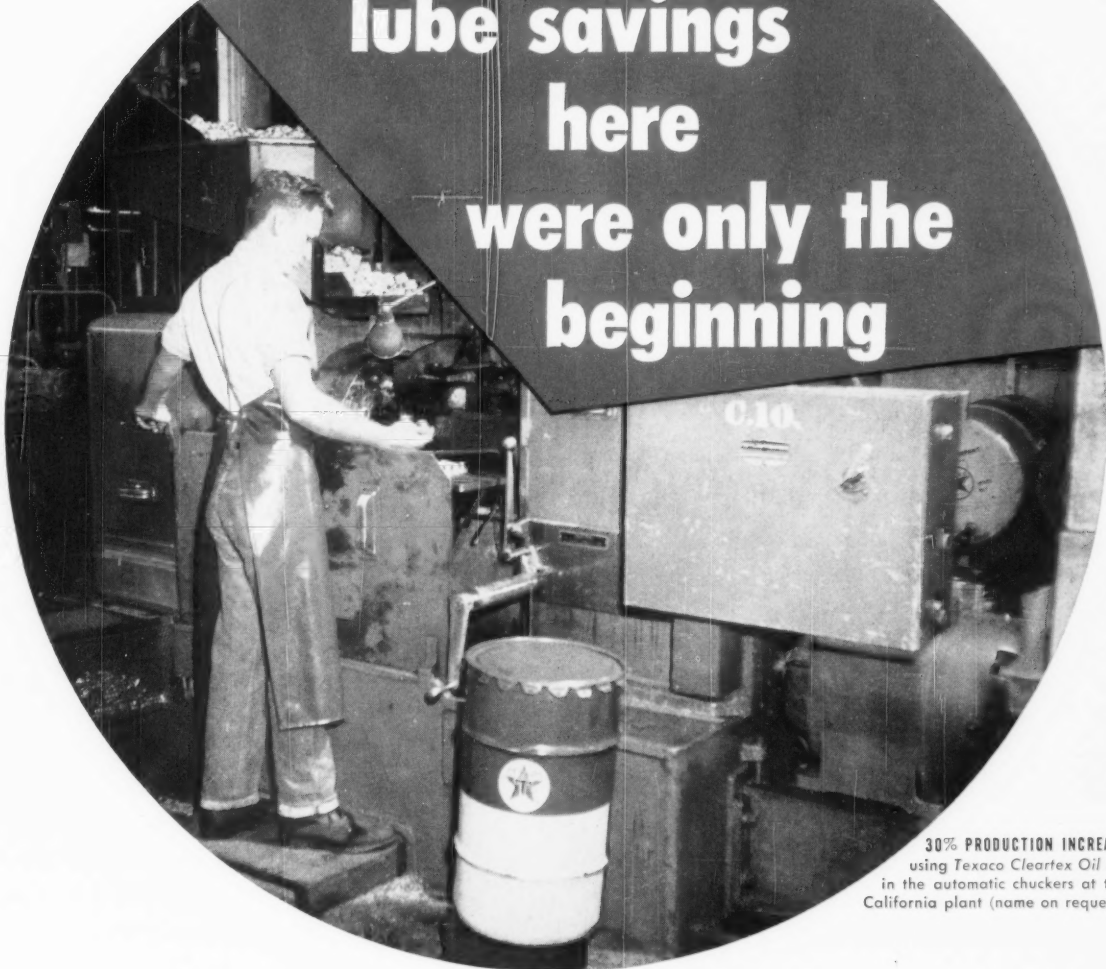
Your firm's name can be listed in telephone directories of every key city in your marketing area. Customers in those cities can reach you direct by calling a *local* number. It assures them of fast service... a good way to keep orders coming and build customer good will.

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